Bloomberg Businessweek

December 7 — December 13, 2015 | bloomberg.com

Read This, Feel Better

The Good Business Issue

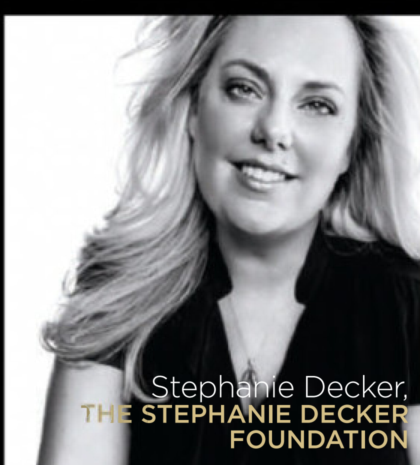
p55

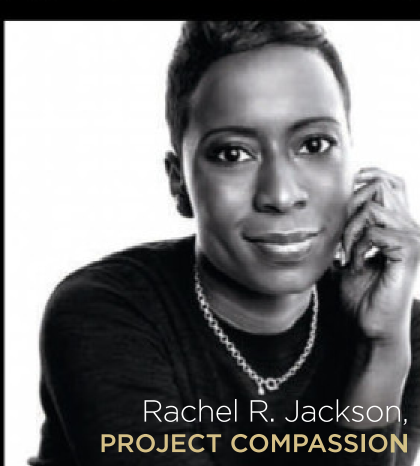

Why Wait™
QUALCOMM®

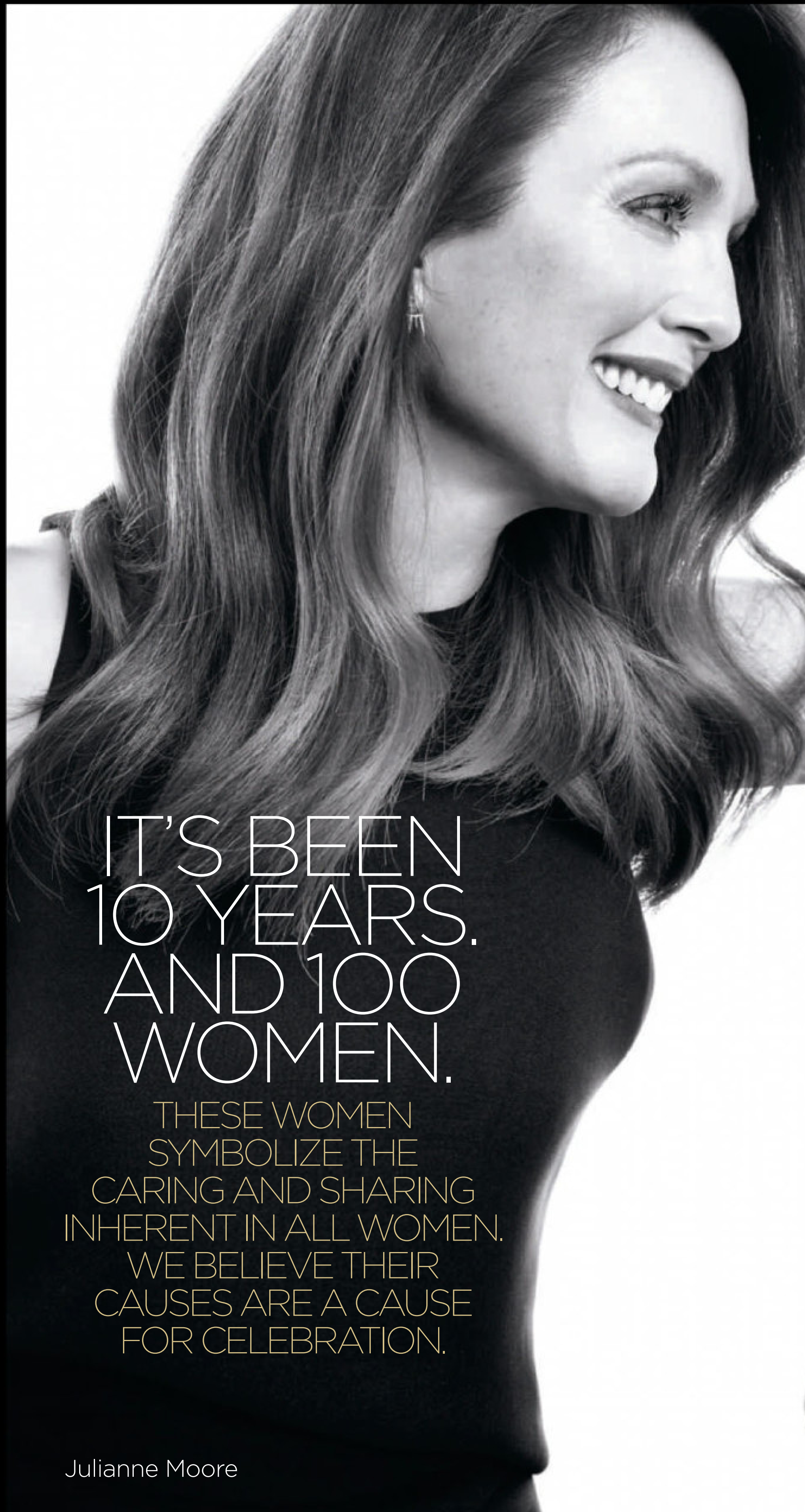

MASINA
1


Kaitlin Roig-DeBellis,
CLASSES 4 CLASSES


Shaaron Funderburk,
OFF THE STREETS

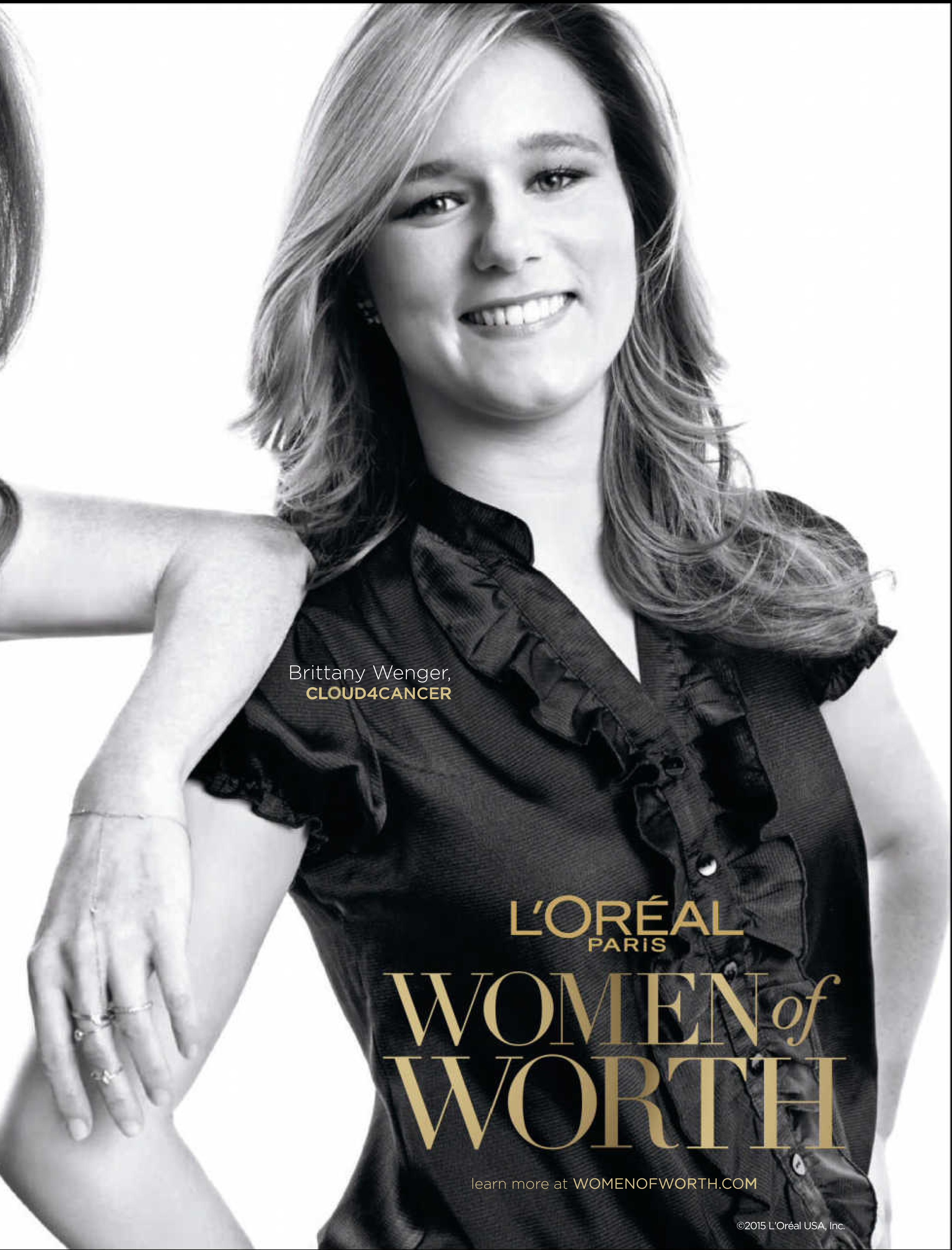

Stephanie Decker,
THE STEPHANIE DECKER FOUNDATION


Rachel R. Jackson,
PROJECT COMPASSION


IT'S BEEN 10 YEARS. AND 100 WOMEN.

THESE WOMEN SYMBOLIZE THE CARING AND SHARING INHERENT IN ALL WOMEN. WE BELIEVE THEIR CAUSES ARE A CAUSE FOR CELEBRATION.

Julianne Moore



Brittany Wenger,
CLOUD4CANCER
L'ORÉAL
PARIS
WOMEN of WORTH
learn more at WOMENOFWORTH.COM
©2015 L'Oréal USA, Inc.

Income Protection Gap

The Mind at Work

Mental health issues are on the rise globally, and can create a vicious circle of risks involving income-related fears and productivity for businesses

Among the causes of disabilities that prevent people from working, mental health issues are appearing more frequently on the radar. In fact, according to the World Health Organization, mental health disorders are expected to surpass physical illness as the major cause of disability globally by 2020.

A recent report by Zurich Insurance Group, *Income Protection Gaps: A rising global challenge*, helps sharpen the context of this trend. The report (http://knowledge.zurich.com/protection-gap/risk-vs-reality) addresses the overall global rise in disabilities, in particular the stress this places on dated social welfare systems (reducing available public funds), and a household's ability to cover the gap between current and expected income (public, employer and private combined) in instances of short- and long-term work interruptions.

According to the Zurich report, employers are exposed to the negative impacts of income protection gaps, too. Growing gaps mean employees are increasingly vulnerable. For workers employed outside their home countries, public support is often highly problematic. But perhaps the main concern for employers is how such gaps hit productivity. Without adequate protection, and with job prospects much reduced for the disabled, many workers will choose to work through minor disabilities at reduced capacity. Left unchecked, income protection gaps are likely to have a greater impact on productivity as workforces age.

Income protection gaps created by mental health issues loom especially large, according to research by the Organisation for Economic Co-operation and Development (OECD). Among the OECD's 34 member nations, mental health problems are now the biggest cause for disability benefit claims in most countries, and they account for almost half of new claims in Denmark, the Netherlands, Sweden and Switzerland.

Impact on costs and productivity

In the U.S., behavioral health issues result in an estimated $94 billion in lost productivity each year, according to the U.S. Substance Abuse and Mental Health Services Administration. In addition to affecting productivity in the workplace, depression and other mental health conditions affect medical costs.

"We know that sometimes a mental health component is really the underlying reason for medical treatment, but it has been masked by a more acceptable medical condition. If it is not being treated correctly, those medical expenses really aren't treating the right condition," says Terri Rhodes, CEO of the California-based Disability Management Employer Coalition.

> "What I'm seeing and hearing today is that this issue is becoming more and more prevalent in business. And there's increasing interest on how to address workplace mental health issues."

> Employers are using early screenings to help detect depression and other mental health issues.

As stress, anxiety and other mental health issues become more prevalent in the workplace, employers are taking note. "What I'm seeing and hearing today is that this issue is becoming more and more prevalent in business. And there's increasing interest on how to address workplace mental health issues," says Rhodes.

Bias is a primary factor for employees who are reluctant to seek treatment or continue to work despite having a mental health issue, says Rhodes. The stigma and misunderstanding that surround mental health issues can delay treatment and prolong the financial impact to an employee and the business—and many mental conditions are treatable. According to the U.S. non-profit National Alliance on Mental Illness, after receiving treatment, between 70 and 90 percent of people with a mental health condition report a major reduction in symptoms, as well as improved quality of life.

With one in four people expected to experience a mental health issue in his or her lifetime, employers are utilizing a number of strategies to help identify and treat affected employees. Early screenings

help to detect depression and other mental health issues, especially after family or medical leave events. Some employers are also educating managers and supervisors on the most common symptoms related to mental health disorders.

"As a disability, mental health can become something of a vicious circle," says David Swaden, Senior Research Manager, Group Public Affairs, Zurich Insurance Group. According to the Zurich report, the fear or actuality of becoming unemployed can exacerbate a mental health issue, as job insecurity imposes further psychological burdens. If the issue does eventually necessitate short- or long-term disability, the gap between a person's accustomed income and what they actually need could force drastic quality of life changes upon them.

"With innovative health benefits strategies, such as encouraging well-being, early intervention or rehabilitation, employers can help halt the circle," says Swaden. In doing so, they can also address a major cause of lost productivity. ●

In OECD nations, mental health issues are the leading cause of disability in 20 to 34 year olds.

knowledge.zurich.com/protection-gap


Preoccupied with managing your fleet?
That's where AT&T can help. We offer a suite of end-to-end asset and fleet management solutions proven to provide near-real-time visibility virtually anywhere. Leaving you free to focus on what matters most.
AT&T Business Solutions
att.com/fleet-management
MOBILIZING YOUR WORLD
© 2015 AT&T Intellectual Property. All rights reserved. All other marks used herein are the property of their respective owners.

Bloomberg Businessweek
Contents

PHOTOGRAPH BY ADAM FERGUSON FOR BLOOMBERG BUSINESSWEEK

"I just spoke with a guy who told me, 'I was sourcing deals from my boxers this morning'"

p40

"I make, uh, you know, a crazy, uh, my compensation is really, really high"

p64

"We're trying to make these guys dinosaurs. And hopefully I'm the meteor by which they all die"

p47

Bloomberg Businessweek
December 7 — December 13, 2015

COVER: ILLUSTRATION BY NEJC PRAH; COVER TRAIL: MANUSCRIPT: COURTESY HARRY RANSOM CENTER

Cover Trail

How the cover gets made

1 "The cover is our second annual Good Business Issue."

"Since it's around the holiday season, I guess it's a good time for our one grudgingly positive issue. What are the stories?"

"It's a diverse set of features, covering how a fashion company is looking for responsible manufacturing, the business of solar energy in Africa, a process that turns sewage into drinkable water, a woman on the forefront of impact investing, and more."

"That's so much positivity it makes me uncomfortable."

"What are you thinking for the cover?"

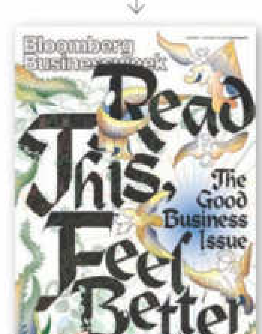
"As I deeply contemplate the concept of 'good,' I'm reminded of a proud time in the history of the graphic arts. A time that dates back all the way to medieval times, when one could argue that the first 'good issues' were produced."

"What are you talking about?"

"I'm referring to illuminated manuscripts, the lost art of decorative hand-lettering and illustration. Long ago, in the sacred halls of monasteries, monks would painstakingly create prayer books for wealthy patrons. They'd spend months, sometimes years, handcrafting each book, covering page after page with gorgeously detailed motifs. The profound skill level of these early art director monks has been unmatched to this day, until now."

"You have three days."

"Oh, crap."




A STAR ALLIANCE MEMBER
WIDEN YOUR WORLD
TURKISH AIRLINES
SO MANY COUNTRIES
SO LITTLE TIME
Gansu, China
TURKISHAIRLINES.COM

Index
People/Companies


92
Bidhya Devi Bhandari


108
Gwen Stefani

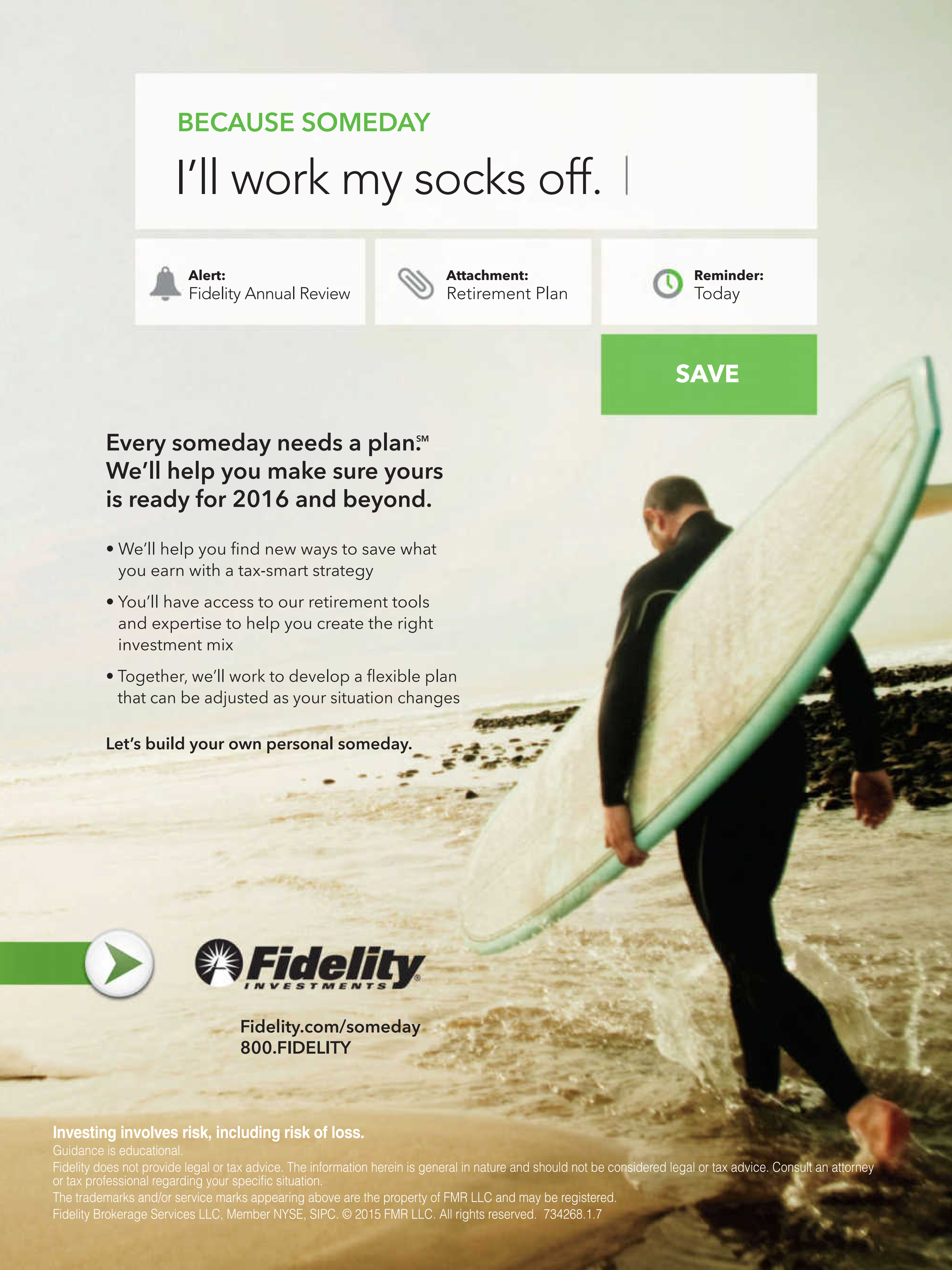

99
Team building with fire

How to Contact Bloomberg Businessweek

Editorial 212 617-8120 **Ad Sales** 212 617-2900
Subscriptions 800 635-1200
Address 731 Lexington Ave., New York, NY 10022
E-mail bwreader@bloomberg.net
Fax 212 617-9065 **Subscription Service**
PO Box 37528, Boone, IA 50037-0528
E-mail bwkcustserv@cdsfulfillment.com
Reprints/Permissions 800 290-5460 x100 or businessweekreprints@theygsgroup.com

Letters to the Editor can be sent by e-mail, fax, or regular mail. They should include address, phone number(s), and e-mail address if available. Connections with the subject of the letter should be disclosed, and we reserve the right to edit for sense, style, and space.

PHOTOGRAPH BY MATHEW SCOTT FOR BLOOMBERG BUSINESSWEEK; GETTY IMAGES (2)


BECAUSE SOMEDAY
I'll work my socks off.
Alert:
Fidelity Annual Review
Attachment:
Retirement Plan
Reminder:
Today
SAVE
Every someday needs a plan.SM
We'll help you make sure yours is ready for 2016 and beyond.
• We'll help you find new ways to save what you earn with a tax-smart strategy
• You'll have access to our retirement tools and expertise to help you create the right investment mix
• Together, we'll work to develop a flexible plan that can be adjusted as your situation changes
Let's build your own personal someday.
Fidelity INVESTMENTS
Fidelity.com/someday
800.FIDELITY
Investing involves risk, including risk of loss.
Guidance is educational.
Fidelity does not provide legal or tax advice. The information herein is general in nature and should not be considered legal or tax advice. Consult an attorney or tax professional regarding your specific situation.
The trademarks and/or service marks appearing above are the property of FMR LLC and may be registered.
Fidelity Brokerage Services LLC, Member NYSE, SIPC. © 2015 FMR LLC. All rights reserved. 734268.1.7

Opening Remarks

Will the Jobs Boom End Too Soon?

By Peter Coy

People who have a hard time landing jobs are finally getting hired. A Fed hike may stop that

When Jack Schreiner needs more workers for his rubber-products factory in Nebraska, he frequently hires former prisoners. "I often think, There but for the grace of God go I. We've got a couple of folks who have been with us for some time and have been pretty darn good employees," says Schreiner, president of Bruckman Rubber in Hastings. It's not only charity that motivates him: Nebraska's low unemployment rate, 2.9 percent in October, has driven him to take a serious look at applicants with blemished records. If not for that, he says, "I can't say in all honesty that I would have been quite as open."

As the labor market tightens across the country, employers are stepping up their hiring of people who often have a hard time landing jobs: ex-convicts, people with disabilities, African Americans, Hispanics, teenagers, and those without a high school education. Starbucks, for example, is leading a coalition of more than 30 companies facing talent shortages that have committed to giving jobs or apprenticeships to 100,000 "opportunity youth"—young people who are out of school and out of work. "When the items are flying off your shelves and you can't keep up, you get a little more open-minded" about whom you hire, says Laurence Ball, a Johns Hopkins University economist.

Now the Federal Reserve is getting ready to raise interest rates, concerned the economy is on the verge of overheating. Higher interest rates would chill consumer spending and business investment. Some economists say the biggest losers could be people on the margins who got hired only recently or were just about to get a job. Last hired, first fired. "Every time we get to this point, the Fed says, 'Oops, tight labor market,' and they tighten up interest rates, and firms go back to their old ways," says William Spriggs, chief economist of the AFL-CIO. "It really is discouraging."

As Spriggs observes, we've been here before. In 1956 the German-born economist Henry Wallich split macroeconomists into two groups—"high-pressure" ones, who favor operating the economy hotter to create more jobs, and "low-pressure" ones, who want to run it cooler to keep inflation under control. In 1973, Arthur Okun, a former economic adviser to President John F. Kennedy, made the case for strong growth in a paper for the Brookings Institution called *Upward Mobility in a High-pressure Economy*.

Okun, who died in 1980, still has followers. "It's OK to run what I would refer to as a high-pressure economy right now," John Williams, president of the Federal Reserve Bank of San Francisco, told reporters on Oct. 1. Fed Chair Janet Yellen has also harked back to Okun's concept. "Attracting discouraged workers back into the labor force may require a period of especially plentiful employment opportunities and strong hiring," she wrote in remarks prepared for delivery at the University of Massachusetts on Sept. 24. "More speculatively," she added, putting a lot more people to work could increase overall productive capacity, "thereby improving Americans' standard of living."

Yellen's speech made an impression on Laurence Meyer, who served with her on the Board of Governors in the 1990s. He said high-pressure theory "goes against everything I taught at the university [Washington University in St. Louis] for 27 years." But, he allowed, she might be onto something. If the Fed does manage to stimulate enough demand for labor to put a dent in the number of underemployed workers, he told Bloomberg in October,

Hawks worry the economy will tip over into inflation if Yellen keeps rates low

IRED

it "would be a fantastic achievement."

Employers can be blinded by habit or discrimination. They fish in the small pool of their preferred job candidates rather than consider less-familiar applicants. The plight of black college graduates illustrates the problem. Even though college graduates in general are only half as likely to be unemployed as high school grads, in October black college grads were slightly *more* likely to be unemployed than white high school grads, according to Bureau of Labor Statistics data. In a test using fake résumés, conducted several years ago by sociologist Devah Pager, white men who reported having a criminal record had a better chance of getting called for a job interview than black men without a criminal record. Passing over perfectly qualified black applicants is "irrational" for employers, says the AFL-CIO's Spriggs, who's black, "but you need a period of low enough unemployment to clean up these disparities."

The betting is still that the Federal Open Market Committee will raise interest rates at its Dec. 15 to 16 meeting and continue to nudge them higher sporadically thereafter. One reason is that Milton Friedman, the late, great conservative economist, continues to loom large at the Fed. In his presidential speech to the American Economic Association in 1968, Friedman said there's no free lunch: Efforts to suppress the unemployment rate below what he called its natural level might work briefly but are destined to fail eventually, resulting in nothing over the long run but spiraling inflation. The Fed, Friedman said in the Space Age lingo of the 1960s, "will be like a space vehicle that has taken a fix on the wrong star."

The ghost of Friedman lives on in a computer model the Fed's staff consults in making economic projections. It builds in an assumption that very low unemployment will result in unacceptably high inflation. The latest version projects that all the extra labor and other resources in the economy will be used up by early next year, which, if true, implies upward pressure on wages and prices, says Michael Gapen, chief U.S. economist at Barclays. Actually, that's starting to happen: Inflation-adjusted hourly compensation rose 3.4 percent in the third quarter from a year earlier, up from an annual average increase of only 0.3 percent in the previous nine years, according to data released on Dec. 2 by the Bureau of Labor Statistics.

The hawks on monetary policy are undeniably correct that workers don't materialize from thin air just because the unemployment rate goes down. A lot of people who went into early retirement or on disability are never coming back, no matter how strong the demand for labor, says David Mericle, an economist at Goldman Sachs. Charles Plosser, who was president of the Federal Reserve Bank of Philadelphia before stepping down in March, told Bloomberg in September, "I know of no good economic theory" that says the central bank can do anything about boosting labor force participation or full-time work. The Fed "is setting up expectations it can't meet. That could undermine its credibility," he said.

Yellen has expressed mixed feelings about keeping a high flame under the economy. If the Fed waits too long to raise rates and then has to tighten abruptly to extinguish inflation, it "would risk disrupting financial markets and perhaps even inadvertently push the economy into recession," she said in a speech in Washington on Dec. 2. That wouldn't benefit anybody.

Yet as the great pivot toward fighting inflation begins, U.S. employment remains far from full. The jobless rate for blacks, 9.2 percent in October, was equal to the highest that the white unemployment rate got in 2009, when joblessness was still considered a national emergency. Chronic unemployment is deeply damaging, says Joseph Carbone, chief executive officer of WorkPlace, a nonprofit based in Bridgeport, Conn., that trains and places the long-term unemployed. "You get complacent, detached. You lose skills," he says. "Depression and family difficulties develop. They militate against your being successful."

Ultimately, how hot to run the U.S. economy comes down to a judgment about what's important. The Fed's decisions, while couched in the antiseptic language of monetary economics, are unavoidably bound up in hard questions about fairness, race, and inequality. B
—With Craig Torres and Rich Miller

To read Justin Fox on what a unicorn is worth and Matthew A. Winkler on auto manufacturing, go to
Bloombergview.com

Why It's Right to Say No to Ethanol

The EPA may appear to be on Big Oil's side, but rewarding Big Corn is a worse option

Is the U.S. Environmental Protection Agency in the pocket of Big Oil? Is it siding with "climate deniers"? The claims are as ridiculous as they sound, but they may become more common now that the agency has released its newest "ethanol mandate," which requires less use of the biofuel–and thus a greater dependence on fossil fuels–than Congress and the agricultural lobby called for. Ignore the critics: Lowering the ethanol requirement is good for consumers, cars, and the planet.

Under the renewable fuel standard released on Nov. 30, the EPA is calling for 18.1 billion gallons of ethanol to be blended into the nation's gasoline supply next year. That's 4.1 billion gallons less than Congress required in its 2007 Energy Independence and Security Act, which was a well-intentioned effort to reduce the Middle East chokehold on American energy after Sept. 11. Supporters of the law also claimed it would help keep prices low at the pump and be better for the environment.

But the oil market and the world have changed in the eight intervening years. Increased U.S. production of oil from fracking and other technologies has the country far less dependent on foreign oil than anyone could have foreseen. And cars are more efficient.

In addition, the claims of ethanol's earth-friendliness appear dubious: Reports from the National Academy of Sciences, the United Nations, and the Environmental Working Group found that corn ethanol may actually have higher emissions than petroleum-based gasoline. And that doesn't even account for the fossil fuels that go into raising, harvesting, and shipping ethanol to market.

Finally, there is the American taxpayer and consumer to consider. The industry has received tens of billions of dollars in subsidies and tax breaks since the 1980s. Meanwhile, since 40 percent of U.S. corn goes into biofuels, Americans pay an estimated $40 billion a year more at the grocery store.

This is not to say that moving toward biofuels is a mistake. Other technologies, such as the use of switchgrass and other "cellulosic" materials that humans don't eat, show promise. But for now they cost far more, a condition that's exacerbated by Washington propping up the ethanol industry.

Ethanol backers are right that the large oil companies, which also get more than their fair share of taxpayer largesse, will benefit from having less biofuel blended into their gasoline. So what? That doesn't change the argument against ethanol.

The agricultural lobby and its congressional allies–not to mention presidential candidates stumping for Iowa votes–are unlikely to take this defeat quietly. The EPA, consumer groups, environmentalists, and free-market conservatives need to stand strong, even if that means making common cause with Big Oil.

Raise the Smoking Age to 21

Tobacco addiction has huge consequences, and prevention is key to bringing down the costs

Public health in the U.S. has come a long way from the 1960s, when almost half of adults smoked. Today that rate is 14.9 percent. The problem is, that's still far too high. Bolder steps to prevent and reduce tobacco addiction are needed–like the one Hawaii took last summer when it raised the legal age for tobacco purchases to 21.

Hawaii became the first state to make this change after observing that the first such local law, adopted in Needham, Mass., in 2005, resulted in a decline in youth smoking of more than half. In 2013, New York became the first big city to follow suit (under then-Mayor Michael Bloomberg, majority owner of Bloomberg LP). Almost 100 localities have done as much. The California Senate passed a bill this summer, and the Massachusetts legislature is also weighing the change.

A higher age limit is a good strategy. Four out of five adult smokers became daily users before they turned 21. A Philip Morris memo from the 1980s warned, "Raising the legal minimum age for cigarette purchase to 21 could gut our key young adult market (17-20)."

If the federal government were to raise the smoking age to 21, it could cut future smoking among today's teenagers by 12 percent, according to the National Academy of Sciences. It would also prevent about 223,000 premature deaths among people born between 2000 and 2019.

Critics make a familiar counterargument: If 18-year-olds can vote and serve in the military, why can't they light up? It's a fair point. This age group also can't drink alcohol, however, and the case for limiting access to tobacco is even stronger, because there's no safe level of tobacco use. Moreover, smoking carries a heavy cost, in both medical bills and lost productivity. Cities, states, and the federal government share a compelling interest in helping young adults live longer, healthier lives.

ILLUSTRATION BY TOMI UM

The Yuan Still Has Some Gro

December 1948
The first renminbi notes are issued by the Communist Party. Rigid exchange controls are put in place to safeguard the fledgling currency.

November 1993
The party's Central Committee sets a long-term objective of a floating exchange rate and full convertibility for the yuan.

May 2003
The George W. Bush administration calls on China to revalue or float the yuan, which U.S. manufacturers say is as much as 40 percent undervalued.

July 2005
China scraps the decade-old peg to the dollar and says it will let the yuan fluctuate against a basket of currencies.

▶ Despite the IMF's nod, the yuan faces a long and perilous journey to becoming a global currency

▶ "The international community will have more expectations for China"

It took half a decade of incremental policy changes plus a couple of years of lobbying, but China finally overcame doubts and objections on Nov. 30 to secure reserve status for its currency. Officially referred to as the renminbi, or "people's currency," the yuan will join the dollar, euro, pound, and yen in the International Monetary Fund's global currency basket, effective on Oct. 1, 2016. In anointing the yuan as a component of the fund's special drawing rights (SDR)—a kind of overdraft line of credit for IMF members—the organization was recognizing "the progress that the Chinese authorities have made in the past years in reforming China's monetary and financial systems," said IMF Managing Director Christine Lagarde. Beyond the prestige factor, the IMF move will do little for the yuan, boosting demand only modestly in the near term as central banks and sovereign wealth funds rebalance their holdings to reflect the composition of the SDR basket.

In reality, the renminbi's evolution into a global currency is only just beginning. While meeting the IMF's "freely usable" requirement, the yuan is still a long way from a "freely convertible" currency—one that can be exchanged for other currencies without restrictions. That's the long-term objective of reformers within China's Communist Party such as central bank Governor Zhou Xiaochuan and his deputy, Yi Gang. They and their allies would like to see market forces play a much bigger role in areas such as interest rate setting and the allocation of credit, but face resistance from party stalwarts who have prospered from a planned economy. After the IMF announcement, Yi was quick to highlight the unfinished business. "Joining the SDR also means that the international community will have more expectations for China in many financial and economic aspects, so we also feel that the burden on our shoulders is heavier," he told reporters in Beijing.

The Five-Year Plan the party's leadership approved in October sets a goal of greater yuan convertibility by 2020. It took Japan 40 years to liberalize its exchange rate, interest rates, and financial sector only to see an asset bubble swell, then burst, hobbling its economy for two decades. "Experience shows that financial reforms raise the risk of financial instability," says Louis Kuijs, head of Asia economics at Oxford Economics in Hong Kong. "As long as those reforms are conducted cautiously and in the right sequence, this should in the long term be good for China's economy and financial system."

In August, Beijing policymakers had a taste of what can happen when investors are blindsided. The People's Bank of China introduced a mechanism that allows market participants a role in setting the daily reference rate for the yuan. The sudden move sparked massive capital outflows, which is why central bankers usually spend months telegraphing their intentions before making such changes.

As part of its transition to a more flexible exchange rate, Beijing needs to gradually dismantle controls on the movement of capital. Multinationals that want to bring in large sums from

ILLUSTRATION BY BRAULIO AMADO

wing Up to Do

May 2007
The central bank widens the yuan's trading band, allowing the currency to move as much as 0.5 percent on either side of a daily reference rate.

April 2012
After almost five years of not tinkering with the trading band, China widens it to 1 percent.

September 2014
Direct trading between the yuan and the euro begins in China's interbank foreign exchange market.

November 2015
The IMF's executive board announces the yuan will join the dollar, euro, pound, and yen in the special drawing rights basket.

abroad to invest in their China operations must deal with considerable red tape; Chinese travelers face an annual cap on how much cash they can withdraw while overseas using a debit or credit card; and foreign portfolio investors are subject to myriad restrictions on the types of yuan-denominated financial instruments they can hold. Economists say freer movement of capital would make the Chinese economy more efficient by forcing local companies to borrow and issue shares and bonds at the true market prices for capital. "A deep and liquid capital market that's accessible to foreign investors is key," says Cui Li, deputy director of the International Finance Forum Institute and a former IMF senior China economist.

Barriers are coming down slowly–and selectively. While Beijing granted foreign central banks and sovereign wealth funds access to the nation's $6.1 trillion bond market, other institutional investors face layers of regulation or are excluded entirely. China is also testing programs in its Shanghai free-trade zone that feature less burdensome rules for moving money in and out of the country. More steps may be discussed at the leadership's annual economics conference this month. "China is at the beginning of what will become an increasingly complex story over the coming years and decades," says Alexander Sullivan, an adjunct fellow at the Center for a New American Security in Washington. *—Enda Curran, with David Tweed*

The bottom line China's reformers have plenty to do to achieve their stated goal of increasing the convertibility of the yuan by 2020.

Elections

Venezuelans Prepare To Vent at the Ballot Box

▶ **Polls are predicting a win for the opposition in legislative elections**

▶ **"They're too busy fighting one another to ever come here"**

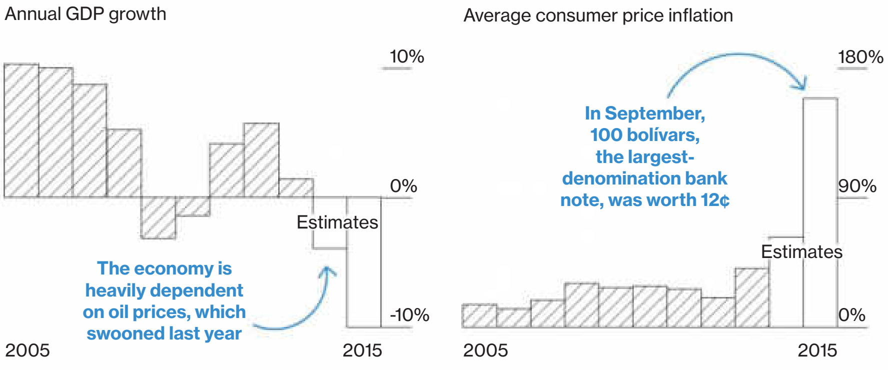
"I've been forced to become a vegetarian," says Nelson Velázquez, a construction worker waiting in line to buy eggs and flour in western Caracas. "I haven't seen chicken in months, and beef is far too expensive. What began as a revolution has turned into a betrayal."

Velázquez will get a chance to vent his frustrations at the ballot box on Dec. 6, when Venezuela elects a new legislature. Chronic shortages of everything from cancer drugs to car parts, triple-digit inflation, and rampant crime and corruption have soured many Venezuelans on the Bolivarian Revolution, the oil-financed socialist project launched by Hugo Chávez. Polls are predicting a resounding defeat for the Socialist Party, which has ruled the country since 1999. The opposition's margin of victory may be narrower than the surveys anticipate, given the large number of undecided voters.

Either way, analysts don't expect the election to lead to sweeping change. An opposition-controlled National Assembly will have every other branch of government stacked against it, which will likely lead to gridlock. "These elections open the door to a new country, but they don't define it," says Dimitris Pantoulas, a Caracas-based political consultant. "It's not the end; it's just the beginning."

Soaring prices and empty store ▶

Venezuela: State of Misery



DATA: INTERNATIONAL MONETARY FUND

◀ shelves are daily hardships, a byproduct of a tangled system of price and currency controls instituted by Chávez and extended by President Nicolás Maduro, his handpicked successor. This year's collapse in oil prices has brought fresh challenges. Gross domestic product will shrink 10 percent this year—the most of any country in the world—according to forecasts by the International Monetary Fund. "We have performance so negative it's comparable to a country at war," says José Manuel Puente, an economist at the Institute of Advanced Studies in Administration, a business school in Caracas. Almost 90 percent of Venezuelans now have a negative view of the country's condition, according to Datanálisis, a Caracas polling firm whose surveys show the ruling party's candidates trailing the opposition by almost 20 points.

> **"These elections open the door to a new country, but they don't define it. It's not the end; it's just the beginning."** —*Political consultant Dimitris Pantoulas*

Maduro has, on occasion, said he could accept an opposition-controlled congress but more often has vowed to "win by any means." During an October broadcast on state television, Maduro said "the revolution will not be surrendered, ever," and warned that an opposition win would usher in "one of the most turbulent and poignant stages" in Venezuela's political history.

The Maduro administration has been criticized by the Organization of American States for its refusal to allow international observers to monitor the vote. Tensions in the runup to the election have been heightened by the shooting death of an opposition activist at a rally last month.

A decisive win by opposition parties could embolden them to mount a recall referendum to unseat Maduro, a maneuver that failed against Chávez in 2004. To accomplish that, or even less ambitious goals, opposition parties will have to overcome fierce internal divisions that have hobbled them in the past. "What proposals do they have?" says Ingrid Martínez, an employee of the national statistics agency who attended a Socialist Party rally in a Caracas slum. "They're too busy fighting one another to ever come here. Their only interest is taking down the government." —*Andrew Rosati*

The bottom line Venezuela's opposition is set to win a majority in the national assembly, ushering in a new era of confrontation and gridlock.

Finances

Amid Scandal, the Pope Sticks With Reforms

▶ **Two books highlight more Vatican dysfunction and mismanagement**

▶ **"The Roman Curia does feel that it in some sense is above the law"**

More than two and a half years after Pope Francis took office determined to clean up corruption, the Vatican is still finding financial skeletons in its many closets.

Two new books chronicle widespread mismanagement in the Holy See, including auditors' discovery of $1.5 billion stashed in hidden accounts and the use of alms for the poor to plug holes in the church budget. The Holy See had a €25.6 million ($27.2 million) deficit in 2014. One of the books, *Merchants in the Temple*, by Gianluigi Nuzzi, also includes a description of a 2013 tape recording of Francis telling senior clerics that spending was "out of control."

Adding to the impression of disarray, the Vatican in November filed criminal charges against a Spanish monsignor and two other members of a financial reform team appointed by the pope. They're accused of leaking information to the books' authors, who also face trial in a Vatican court. All the accused have denied any wrongdoing. "The trial is a sign the Vatican is on the defensive, and a sign of weakness," says Emiliano Fittipaldi, author of the second book, *Avarice*. The Holy See hasn't disputed the authenticity of the material, but the pope has called the breach of secrecy "a grave illegal act."

The scandal doesn't appear to have slowed Francis's reform push. In the latest move, he's ordered a panel of leaders from the Vatican and the Vatican bank, aided by professional auditors, to determine the value of the church's massive financial and real estate holdings—including St. Peter's Basilica and the Sistine Chapel. The group held its first meeting on Nov. 27. "You can't plan if you don't understand what your assets and obligations are," says Danny Casey, right-hand man to Francis's economic czar, Cardinal George Pell. "It's not our money. The stakeholders are the 1.2 billion faithful and the many we serve," says Casey, in an interview at the ornate Apostolic Palace, which includes part of the Vatican museums and the papal apartments. (Francis doesn't live there, having opted instead to stay in a modest Vatican guesthouse.)

Francis has replaced the top management and supervisory board of the Vatican bank and brought in **Promontory Financial Group**, a Washington-based compliance consulting firm,

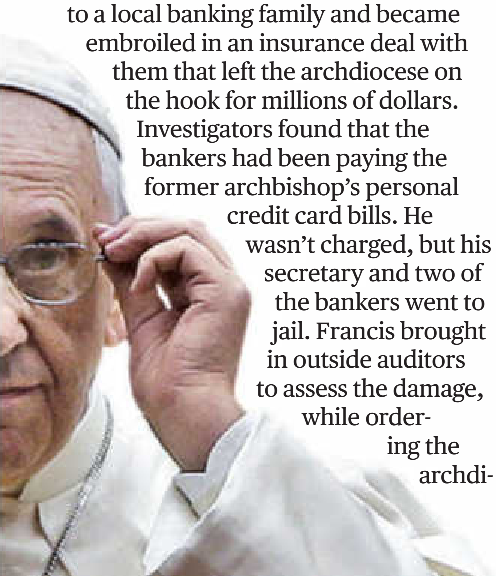

MAX ROSSI/REUTERS

to help identify suspicious transactions and close accounts that may have been used for money laundering and other illicit activities.

Much of the material in the books came from reports of a seven-member financial reform commission Francis appointed in 2013. The group, led by Maltese economist Joseph Zahra, brought in auditors Ernst & Young and KPMG, which spent almost a year combing through Vatican accounts. (Zahra wasn't one of the members accused of leaking.) Among other things, they found inventory discrepancies suggesting theft or fraud at some Vatican shops and evidence of a thriving bootleg trade in reselling tax-exempt cigarettes and gasoline, which are ostensibly for the exclusive use of Vatican residents and employees.

At the commission's recommendation, the pope has tightened supervision of the Roman Curia, the body that runs the Vatican. He has appointed an independent auditor and established a secretariat for the economy—the equivalent of a finance ministry—headed by Cardinal Pell. The new measures "are operating effectively and efficiently," says Zahra, the senior lay member of another new body, the Council for the Economy, that oversees operations for most Vatican institutions. "We are seeing the results—improved financial reporting and budgetary control," he says. For example, it was Pell's group that identified the $1.5 billion in assets in accounts Vatican leaders were unaware of.

Francis moved swiftly to clean up a scandal in the Archdiocese of Buenos Aires after he became archbishop there in 1998. His predecessor had close ties to a local banking family and became embroiled in an insurance deal with them that left the archdiocese on the hook for millions of dollars. Investigators found that the bankers had been paying the former archbishop's personal credit card bills. He wasn't charged, but his secretary and two of the bankers went to jail. Francis brought in outside auditors to assess the damage, while ordering the archdiocese to maintain arm's-length relationships with its bankers in the future.



His task at the Vatican is far more complex. The audit of church assets, the first such inventory in history, is expected to take three years. A preliminary assessment by the financial reform commission suggests that the Vatican may have been understating the value of its real estate by a factor of four—thus allowing cardinals and other clerics to pay only a fraction of the market rent while living in sumptuous Vatican-owned apartments. "It is Byzantine, like a hall of mirrors," says Austen Ivereigh, a British journalist who has written a biography of the pope.

The undervalued real estate also deprives the Vatican of revenue it could use for operating expenses. Instead, auditors found that an estimated two-thirds of "Peter's Pence," an annual collection of charitable donations by church faithful, was used to cover Vatican budget deficits.

Opposition from entrenched interests within the Roman Curia, many of whom benefit from such practices, could be Francis's most formidable obstacle. The 3,000-strong bureaucracy, led by powerful cardinals, has resisted efforts by previous popes to impose discipline, says John Pollard, a professor of papal history at Cambridge University. "The Roman Curia does feel that it in some sense is above the law, and the fact that the Catholic Church has its own legal system rather reinforces that," he says.

€25.6
million

The Holy See's 2014 budget deficit

The recording of Pope Francis makes clear his frustration with the bureaucrats. "If a job was done without an estimate, without authorization, we don't pay," he told senior clerics at a June 2013 meeting. "C-l-a-r-i-t-y. That's what's done in the most humble companies, and we have to do it, too."

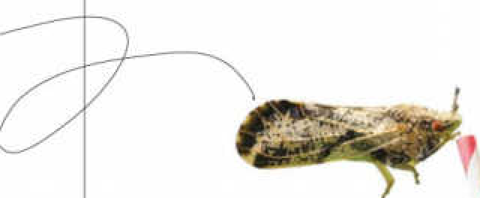
Francis's best hope for change may lie outside Rome, Pollard says. The pope has stepped up the pace of meetings, or synods, with the world's Catholic bishops. "The synods will constantly be bringing bishops to Rome ▶

◀ to take part in discussions with him," Pollard says. "If any momentum gets behind that, then Francis can avail himself of a very powerful instrument to constantly challenge the Roman Curia, and maybe to reform it."
—*Carol Matlack and John Follain*

The bottom line Pope Francis is bringing in outside auditors and consultants to help clean up questionable finances and corruption.

Commodities

A Giant Threat From Tiny Insects



▶ **Florida's economy suffers along with dying orange trees**

▶ **"In Brazil ... they don't have the 'bad neighbor effect'"**

Les Dunson, a 53-year-old orange farmer in Winter Haven, Fla., has seen his output fall to about 600,000 boxes of the fruit a year, down from 1 million a decade ago. The culprit? A "little monster," as Dunson calls the psyllid, a tiny winged Asian insect that carries a deadly disease that has infected increasing numbers of citrus trees.

This year's harvest, which began on Oct. 1, is expected to shrink to 74 million cases, the lowest since 1964, according to the U.S. Department of Agriculture. Last year's crop yielded 96.8 million. The blight has pushed up prices for frozen concentrated orange juice, raising costs for **Coca-Cola**, maker of Minute Maid orange juice, and **PepsiCo**, which sells Tropicana and Gatorade. The disease has led to more than $7.8 billion in losses and the elimination of more than 7,500 jobs from 2006, soon after it was first found, through 2014, according to a University of Florida report. The Florida Department of Citrus says that by 2026 the harvest could be down to 27 million cases and calls the outlook for the industry "precarious."

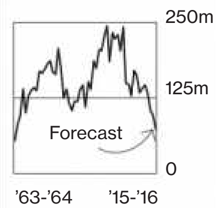
Officially called Huanglongbing, Chinese for "yellow dragon disease," the condition is better known as citrus greening. Greening is caused by a bacterium, carried by the insect, which blocks nutrients from passing through a tree's vascular system. Once a tree is infected, its leaves develop yellow veins or yellow-green mottling, or they lose their green color altogether. The oranges, which remain partially green, have aborted seeds and a salty, bitter taste, and fall off prematurely. Infected trees are doomed as soon as their sap is contaminated, but symptoms can take several years to appear, says Michelle Cilia, an assistant professor at Cornell University affiliate Boyce Thompson Institute for Plant Research, who studies greening.

Some growers apply nutrients directly to leaves to keep trees productive even as they're dying. Others are using pesticides, although too much can burn the fruit. The psyllids have also developed resistance to certain chemicals. Dunson, who runs **Dunson Harvesting**, which his grandfather started in the 1950s, says pesticides and nutrients haven't made a big difference.

The disease is also killing crops in Brazil, the world's top orange grower. According to Fundecitrus, a research foundation funded by farmers and processing companies, the share of trees in Brazil infected by greening increased 159 percent from 2012 to 2015. About 35 million plants are infected, or about 18 percent of Brazil's citrus trees.

But Brazilian farmers have been more successful at containing the disease because of the size of their operations. Bigger growers can maintain a 100-meter border strip between farms to contain infected areas. "In Brazil, because they can control at such a large scale, they don't have the 'bad neighbor' effect," says Robert Shatters Jr., a research molecular biologist for the USDA's Horticultural Research Laboratory in Fort Pierce, Fla. The Brazilians also use intense monitoring and spraying to create a protective wall. Some of the country's farms have been able to contain the infection, and crops have been restored in areas once devastated by the disease.

Florida orange production
Number of boxes



Ibiapaba Netto, executive director of industry group CitrusBR in São Paulo, says Brazil and the U.S. have taken different approaches to the problem. Florida has spent most of its research dollars on finding a cure for greening. Brazilian producers instead have concentrated on preventing the disease from spreading by eliminating sick trees and killing the insects. "Producers are getting more efficient in fighting it," Netto says. Adds Shatters: "They're able to impose strict rules about removing infected trees, which they were able to apply with more clout, and they all abide by that."

Finding a permanent solution is difficult because the bacterium that causes the disease can't be bred outside citrus groves, Shatters says. Still, scientists say that in the short term, more can be done to try to contain the damage and prolong a tree's productivity. Some Florida farmers are trying thermotherapy: encasing tree canopies in plastic tents to raise the temperature, which slows the spread of the bacteria and keeps trees healthy longer. That "will provide a window of opportunity for the growers to remain productive while more midterm and long-term solutions come down the road," he says.
—*Marvin Perez, with Gerson Freitas Jr.*

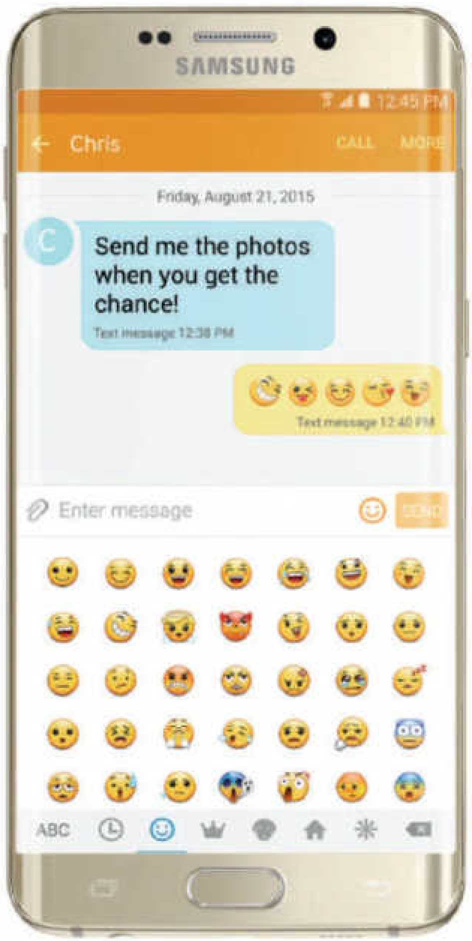
The bottom line Florida's orange harvests could drop by almost 64 percent over the next decade if a tree-killing disease isn't controlled.

Edited by Cristina Lindblad and Dimitra Kessenides
Bloomberg.com

PHOTO ILLUSTRATION BY 731; PHOTOS FROM TOP: DAVID HALL/USDA; GETTY IMAGES; MARK ELIAS/BLOOMBERG; DATA: U.S. DEPARTMENT OF AGRICULTURE

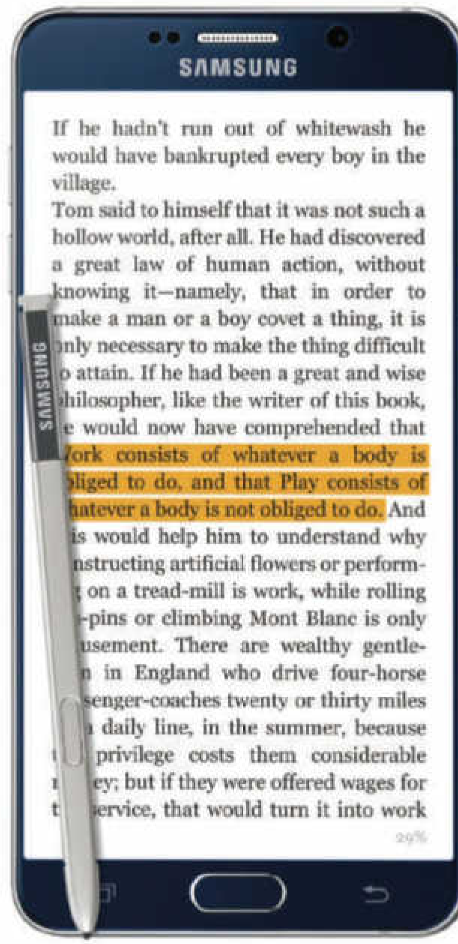
SAMSUNG

TEXT.



SAMSUNG
Galaxy S6 edge+

BOOK.



SAMSUNG
Galaxy Note5

Choosing between the beautiful Galaxy S6 edge+ with over 3.6 million pixels on the largest-ever dual edge display and the powerful Galaxy Note5 with Multi Window and the most advanced S Pen yet is a textbook case of a no-brainer. You're right either way.

PHOTO ILLUSTRATION BY 731; PHOTOGRAPHS BY ERIC HELGAS FOR BLOOMBERG BUSINESSWEEK; STARS: COURTESY NASA

▶ Disney bets big on *Star Wars* merchandise for women and girls

▶ The franchise is becoming "more inclusive of both genders"

Walt Disney has what could be its most formidable heroine ever in Rey, a main character in *Star Wars: The Force Awakens*. She could be a merchandising juggernaut, too.

In trailers, the protagonist played by English actress Daisy Ridley races a landspeeder, wields a stafflike weapon, and helps pick an exhausted male ally up off the ground. Not much is known about Rey, because Disney's keeping a tight lid on plot details before the movie's Dec. 18 opening. One sure thing is that Rey is part of a push by the world's largest entertainment company to attract more girls and women to the *Star Wars* franchise and get more money from them by expanding the line of movie merchandise.

Disney has signed deals with dozens of partners, from department stores to home goods retailers, clothing companies to toymakers. Among licensed *Star Wars* products already out or expected soon are $169 stormtrooper necklaces at **Kay Jewelers**, $20 Princess Leia aprons at **Bed Bath & Beyond**, and *Rey's Survival Guide* from **Simon & Schuster**. Brooklyn-based Ample Hills Creamery, whose fans include Disney Chief Executive Officer Bob Iger, has introduced limited-edition light side and dark side ice cream flavors.

That's a big change for a line historically dominated by lightsabers and action figures. Most *Star Wars* products sold before Disney bought **Lucasfilm** in 2012 were toys aimed at boys, says Paul Southern, who ▶

◀ runs the studio's *Star Wars* licensing business. "*Star Wars*," he says, "became known as the biggest boys' brand in history."

Demand is one reason for the shift, which Bank of America Merrill Lynch analyst Jessica Reif Cohen calls a smart move. "Literally everyone I know wants to see this movie, male or female," she says. Morgan Stanley analyst Benjamin Swinburne says annual sales of *Star Wars* merchandise could double, to $4.75 billion worldwide.

Disney is partnering with mass-market makeup brand CoverGirl to test whether a *Star Wars* cosmetics line will sell and help the studio reach a young, female audience who may see the movie and future releases. The line includes $7 Light Side and Dark Side mascara and $6 nail polish in colors such as Nemesis and Red Revenge. Singer and CoverGirl spokeswoman Janelle Monáe has been featured in *Star Wars*-related ads.

The relationship is part of a larger trend of film studios collaborating with cosmetics companies. Besides the historical connection between Hollywood and makeup, such tie-ins have found new life in a YouTube era in which fashion bloggers create tutorials that can generate tens of millions of views.

Patrons of **BoxLunch**, a gift shop in the Glendale Galleria outside Los Angeles, are showing interest in $37 bracelets inscribed with "I love you/I know," the Princess Leia and Han Solo exchange from *The Empire Strikes Back* in 1980, says employee Natalie Norton. "I bought two pillowcases that say that for me and my boyfriend."

Most Valuable Tchotchkes

2014 global retail sales of licensed merchandise of entertainment or character properties*

❶ **Mickey & Friends** Disney	$4b
❷ **Hello Kitty** Sanrio	$3.8b
❸ **Winnie the Pooh** Disney	$2.7b
❹ **Disney Princess** Disney	$2.6b
❺ **Star Wars** Disney	$2.4b
❻ **Cars** Disney	$2b
❼ **Spider-Man** Disney	$1.5b
❽ **Frozen** Disney	$1.4b
❾ **Angry Birds** Rovio	$1.3b
❿ **Peanuts** Iconix	$1.2b

Retailers are figuring out how to arrange displays for the fans being targeted. Some toy sections are segregated by gender, says Ken Nisch, chairman of JGA, a retail design consultant. "If you have a property like *Star Wars* that in theory is trying to be less gender-specific," he says, "you have a challenge."

Social media firestorms erupted when Internet critics decided Disney's merchandise and retail partners **Under Armour** and **Target** hadn't produced enough female-oriented items tied to the film. Under Armour quickly unveiled a line of *Force Awakens* girls' and women's wear after tweets lit into the athletic apparel maker for initially releasing a men-only line. The items—including $35 women's shirts featuring stormtrooper images and phrases such as "Born to lead"—will start shipping on Jan. 1.

After Target started selling six-packs of all-male *Force Awakens* action figures, a #wheresrey hashtag began to trend on Twitter. Target spokesman Lee Henderson says that stores stock several Rey items. "Fans will be seeing even more of her after the film opens," he says. John Frascotti, president of the **Hasbro** unit that makes the action figures, says Rey is "very well represented" in other Hasbro lines. "The franchise is every day becoming more inclusive of both genders," he says.

Los Angeles resident Emily Corbett says when she inquired recently about *Star Wars* merchandise at a **Toys "R" Us**, a clerk directed her and her 6-year-old daughter, Tegan, to "the boys' aisle," where she found nothing associated with Rey. "It'd be nice to have something for girls," Corbett said as Tegan played with a lightsaber. Jessica Offerjost, a spokeswoman for Toys "R" Us, says the company doesn't have gender-dedicated sections and that slim Rey pickings are a result of the toys' popularity. "We are replenishing weekly, but the toys keep flying," she says. Disney says it keeps in daily contact with more than 30 retailers, helping to arrange air shipments of Rey action figures to get merchandise on shelves.

Disney and *Force Awakens* director J.J. Abrams have held off on sending some items to stores, including those tied to another female character, Maz Kanata, played by Lupita Nyong'o. To sell the character now, Abrams would have to give away too much of the story, Lucasfilm's Southern says; and Disney isn't pressing certain manufacturers, such as toymaker **Jakks Pacific**, to put out a wider range of Rey merchandise because it wants new products to arrive on shelves after the film's release.

With chains such as trendy teen retailer **Hot Topic** selling $25 T-shirts with phrases such as "Let's cuddle and watch *Star Wars*," it's not hard to imagine Disney will score on both fronts—persuading more girls to buy the merchandise and see the film.
—*Christopher Palmeri and Jeff Green*

The bottom line Consumers and retailers are demanding more merchandise for women and girls tied to *The Force Awakens*.

Autos

This Taurus May Need Its Timing Checked

▶ **The Ford model is reborn as a pricey sedan in SUV-crazed China**

▶ **"The segment where it will play doesn't grow anymore"**

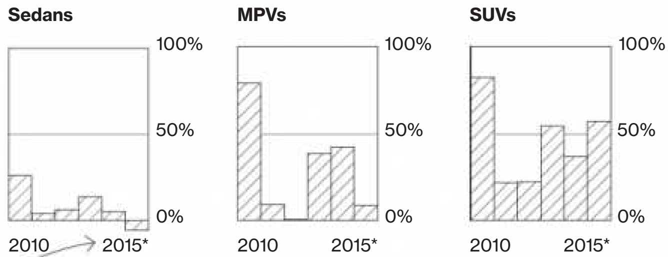
The Taurus was once America's favorite family car, the top-selling model of the 1990s that popularized the aerodynamic look. Then a radical redesign failed to catch on, consigning it to an ignominious dotage as a rental car fleet mainstay. Now, **Ford Motor** is betting

FROM LEFT: KIMIMASA MAYAMA/EPA/LANDOV; COURTESY OF FORD MOTOR COMPANY; *FIGURES EXCLUDE SALES FROM CONTENT LICENSING SUCH AS DVDS AND PRODUCTS CREATED THROUGH IN-HOUSE DIVISIONS; DATA: THE LICENSING LETTER

The new Taurus for China costs as much as $54,500

Sedans Take A Back Seat

Year-over-year change in Chinese auto sales



*2015 FIGURES THROUGH OCTOBER; DATA: CHINA PASSENGER CAR ASSOCIATION

that this faded star can make a comeback, this time in China as a top-of-the-line sedan aimed at businessmen with a weakness for legroom and power-reclining massage seats.

That won't be easy. With a starting price of 248,800 yuan ($39,000) that tops out at 348,800 yuan for the most expensive trim line, the Taurus is crossing into luxury sedan territory dominated by **BMW**'s 3 Series, **Audi**'s A4L, and **Mercedes-Benz**'s C-Class. It's also almost double the price of **Great Wall Motor**'s H6, the best-selling SUV in China. The country's buyers have been ditching traditional sedans for roomier utility vehicles and minivans, sometimes called MPVs (for multipurpose vehicles).

Sales of sedans shrank 6 percent in the first 10 months of this year

The Chinese market has slowed sharply since April, when Ford introduced the car there. Since then, a stock market rout and a weakening economy have sapped car demand, which was also hit by stricter vehicle registration curbs imposed by cities trying to stem worsening traffic and air pollution.

Things got so bad that the government in October cut a 10 percent vehicle purchase tax by half to encourage sales—but the incentive won't apply to the Taurus because its 2.7-liter engine is too large to qualify. "The segment where it will play doesn't grow anymore," says Jochen Siebert, Shanghai-based managing director at JSC Automotive Consulting. "But Ford should be able to win some market share, provided they get the price right."

To help position the Taurus as a high-end business sedan worthy of its luxury-level sticker price, Ford has signed up actor Chen Daoming to endorse the model. He's well-known for playing emperors in Chinese period dramas, including a popular 2001 epic on the reign of the 17th century Qing dynasty monarch Kangxi.

Whether that will help lend the Taurus an imperial touch remains to be seen. Yang Song, a sales executive who owns a Jaguar XJ sedan and Jeep Grand Cherokee SUV, says he may consider buying a Taurus because it's "good value for money," though he thinks it lacks aspects found in BMWs, which he says have "firmer doors." (Local drivers like a satisfying thud.) "It looks good for people using it in business," says Yang, 50, while checking out the Taurus at the Guangzhou auto show in November. "I like that it's spacious and exudes gravitas."

The original 1986 Taurus was a hit with American buyers, its design standing out from the boxy shapes that were standard for family cars. By 1992 it had displaced **Honda Motor**'s Accord as the top-selling car in the U.S., reaching a sales peak of 409,751 vehicles that year. A radical restyling in 1995 and a price increase caused sales to slump, and Taurus ceded the No. 1 title in 1997. Its fading consumer appeal left it relegated to purchases by rental companies before being shelved in 2006. Although it was resurrected in the U.S. in 2009, the model has never again approached the popularity of its '90s heyday.

Besides being on the wrong side of China's SUV mania, analysts say, the Taurus is unlikely to become one of the mainland's biggest models because of its price. Ford's car costs more than twice the average sticker price for the 10 top-selling cars in the country, about 100,000 yuan, according to data from the China Association of Automobile Manufacturers. The best-selling model, **Volkswagen**'s Lavida, starts at 109,900 yuan. Ford's Focus compact, starting at 99,800 yuan, was seventh in sedan sales in China in the first 10 months of the year, with 207,200 units, down 37 percent from a year earlier.

While Ford's SUV models are doing well in China, the sedan sales slump there has dragged down Ford's retail deliveries by 0.4 percent this year through October, after expanding 19 percent for all of last year. The automaker recorded four consecutive monthly declines from June to September before snapping the streak in October after the government halved the 10 percent purchase levy. Still, Ford is betting that the car, made by its joint venture with **Chongqing Changan Automobile**, can draw buyers, in part because of creature comforts such as more legroom and an electric massage function for back seats—where affluent, chauffeur-driven Chinese typically ride. "The Ford Taurus will give the business elite a prestigious user experience," Chen Xu, deputy general manager of Changan Ford Sales, said in a release marking the start of the model's sales in November. "We believe the Ford Taurus will have an extremely good market performance." ▶

Digits

49%

Decline since August in value of **J.Crew Group**'s bonds, the worst-performing debt among U.S. retailers. Among the culprits: discounting and falling sales at established stores

◀ Even if the timing isn't the best to launch a top-end sedan, Ford needs to offer a vehicle like the Taurus if it wants to be a serious competitor in China, says Yale Zhang, a managing director at researcher Autoforesight Shanghai. "Ford needs to fill in every segment to compete in," he says. "They didn't have something in the big sedan segment until this." —*Alexandra Ho*

The bottom line Ford is introducing the Taurus in China at a sticker price as high as $54,500, just as buyers are eschewing sedans in favor of SUVs.

Food

Can Thailand's Seafood King Get Off the Hook?

▶ **Thai Union Group's plan to dominate the fish aisle may falter**

▶ **"The market is waiting for clarity" on a stalled buyout of Bumble Bee**

When **Thai Union Group** agreed to buy the Bumble Bee tuna brand from private equity fund **Lion Capital** for $1.5 billion in December 2014, the company appeared to be on the brink of achieving Chief Executive Officer Thiraphong Chansiri's goal of becoming the world's top seller of branded shelf-stable seafood sold in cans and pouches. Now, almost a year later, the Thai company, which owns Chicken of the Sea and top European brands, is still waiting to close the deal—and the uncertainty is weighing it down.

Up for grabs?

In August, Thiraphong said he expected a decision from U.S. antitrust regulators within six weeks. That deadline passed. Now he says Thai Union should get word on Dec. 18. If he's wrong again, the delay could further disappoint investors who already have helped pull down Thai Union's shares 18 percent this year. The regulatory concerns over the acquisition, combined with worries over the weak economies in Europe and Japan and fluctuations of the baht, are hurting exports. "The market is waiting for clarity on the Bumble Bee deal," says Bualuang Securities analyst Prasit Sujiravorakul, who adds that an outright rejection would be preferable to more delays. "Instead of getting stuck with a deal where you don't really know the results," he says, "it would be better to go with other deals."

Thiraphong wants company revenue to hit $8 billion by 2020, more than double last year's, so Thai Union has been expanding via acquisitions. In 2010 it paid €680 million ($718.3 million) for MW Brands, the Paris-based owner of British seafood brand John West and French brand Petit Navire. Four years later it purchased King Oscar, a Norwegian maker of canned seafood, as well as MerAlliance, a French company that produces smoked salmon. This year it bought lobster processor Orion Seafood International, based in Portsmouth, N.H. Bumble Bee Seafoods would add $1 billion to Thai Union's annual sales, which were about $3.4 billion in 2014.

That growth has captured the attention of critics of the company and its suppliers. Since August, Thai Union's American subsidiary Tri-Union Seafoods has become a defendant in more than 60 class actions in the U.S. charging that Chicken of the Sea engaged in price fixing with American rivals. In November, Greenpeace published a report criticizing Thai Union, alleging it buys from suppliers operating in Thailand that use forced labor on their fishing boats. One Thai Union customer, **Nestlé**, says an internal inquiry found labor abuses aboard

Recently caught fish are sorted by size at the Talay Thai wholesale seafood market in Mahachai

CLOCKWISE FROM BOTTOM LEFT: DARIO PIGNATELLI/BLOOMBERG; FOOD COLLECTION/ALAMY; COURTESY AMAZON; JOHN DIXON/THE NEWS-GAZETTE/AP PHOTO

boats and at production facilities in its supply chain (it didn't identify at which suppliers), and it's implemented safeguards to stop such abuses. "The tuna industry is out of control," says Graham Forbes, global seafood markets project leader for Greenpeace.

With the Bumble Bee transaction in limbo, Thai Union can't afford to let the criticism stand. The company "will vigorously defend itself in these lawsuits," it said in a statement. It's pushing back against Greenpeace as well, saying in another statement that it no longer sources from a supplier and fishing vessel cited in the report. Thai Union says an independent auditor does annual surveys of its supply chain and it "continues to enforce a strict code of conduct with regards to ethical labour practice and ensures all suppliers fully understand our code of conduct."

In response to pressure from the European Commission, Thailand's military government in November approved a plan to send teams to inspect fishing vessels and docks and conduct random checks of seafood processing plants. "Those that cheat, violate the law, or conduct human trafficking, these people have no place in Thai society, let alone any society," Prime Minister Prayuth Chan-Ocha said on Nov. 6.

In July, Thai Union suspended a share sale that was supposed to fund the Bumble Bee purchase. Still, Thiraphong says he's committed to completing the transaction and is even willing to sell Chicken of the Sea to reduce concerns that the Bumble Bee purchase may give the company too much market power. If regulators nix the deal, Thai Union is likely to make another acquisition, says Sunthorn Thongthip, an analyst at Krungsri Securities. With or without Bumble Bee, "we will continue to pursue our revenue growth," Thiraphong told reporters on Nov. 24. "But it will definitely take more time." *—Bruce Einhorn, with Anuchit Nguyen and Chris Blake*

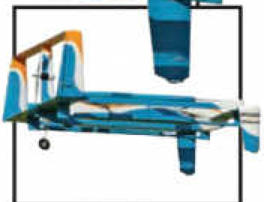
The bottom line If it gets a U.S. regulatory nod, the $1.5 billion buyout of Bumble Bee would make Thai Union the No. 1 seller of shelf-stable seafood.

Edited by James E. Ellis and Dimitra Kessenides
Bloomberg.com

Briefs

By Kyle Stock

Car Crazy



Amazon.com offered a glimpse of the drone it's developing to deliver packages. The machines, which will fly no higher than 400 feet, are capable of carrying 5 pounds.

The auto industry in the U.S. is racing to one of its best years in history, as generous Black Friday incentives lured buyers to dealerships in November. Vehicle sales for the month, fueled by inexpensive gasoline and cheap financing, were up 1.4 percent from the year-earlier period. Among major manufacturers, *Nissan* posted the best November, with a 3.8 percent sales increase. *Morgan Stanley* pledged to cut as much as a quarter of its fixed-income trading staff after shareholders pressured the firm to lower costs in the division. The decision, which affects roughly 1,700 workers, reflects how much Wall Street has cooled on debt markets as it pushes into wealth management. Top FIFA sponsors including *Adidas*, *Coca-Cola*, and *Visa* told soccer's governing body to enact credible reforms in the wake of a widening corruption scandal. In a letter, the companies called for independent oversight of FIFA's revamp and a focus on gender equality. The strong dollar is watering down whiskey. In the recent quarter, sales at *Brown-Forman*, the maker of Jack Daniel's, dipped to a little more than $1 billion, off 4 percent from the period a year earlier. Still, the company reiterated its growth outlook, in part because of its heady returns from superpremium bourbon brands such as Woodford Reserve. *BlueCrest Capital Management* said it would close its $8 billion hedge fund after assets swooned from a peak of $37 billion two years ago. Some $7 billion will be returned to outside investors, as the fund morphs into a private partnership run by founder Michael Platt.

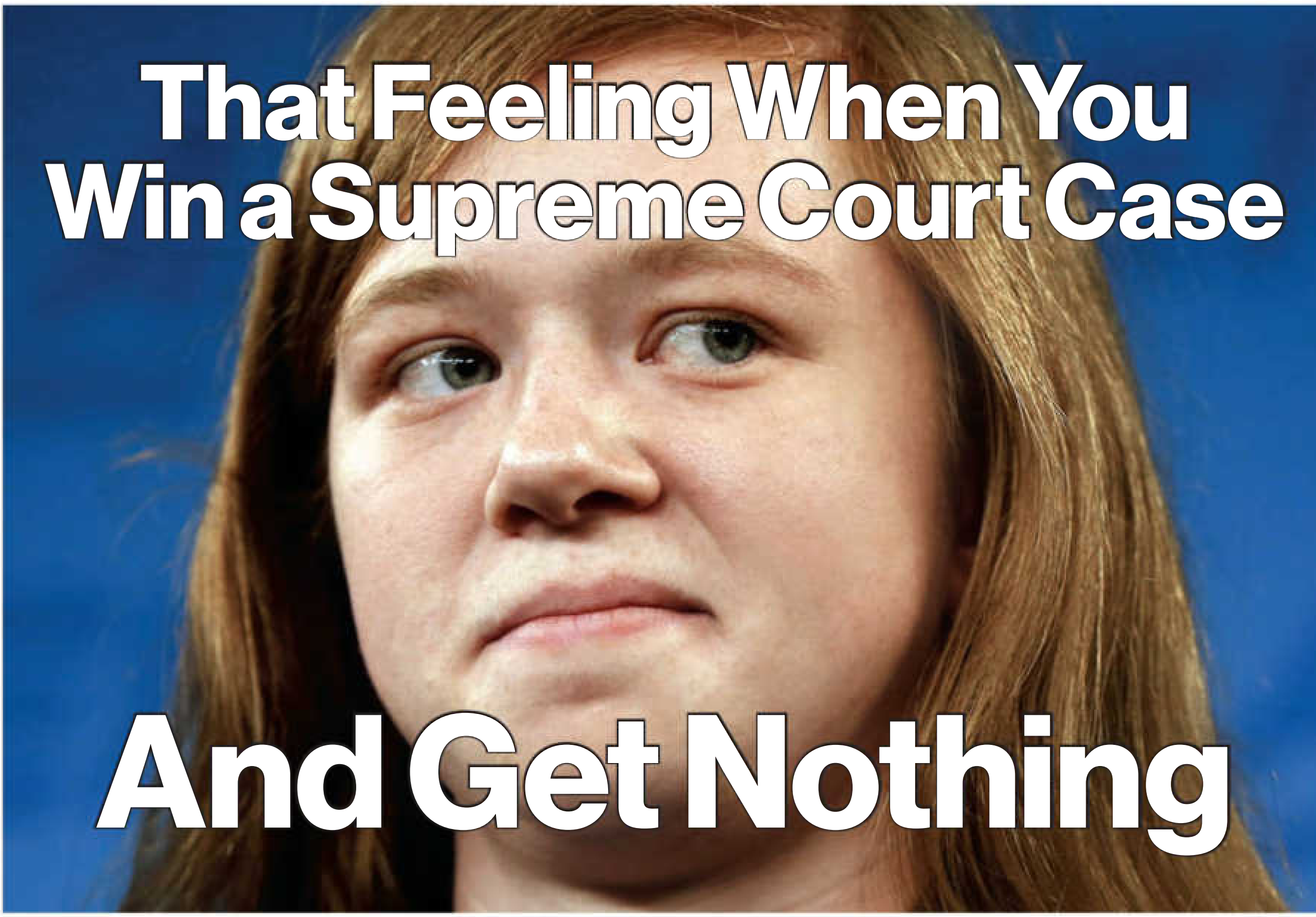
The current value of the **Facebook** shares Mark Zuckerberg and his wife, Priscilla Chan, pledged to their new charitable foundation, the Chan Zuckerberg Initiative.	$45 billion

CEO Wisdom

"I don't think my wheelhouse is comfortable in Wall Street. My wheelhouse is small-town America."
—Jimmy John Liautaud, CEO of sandwich chain Jimmy John's, on scrapping a planned IPO

December 7 — December 13, 2015

That Feeling When You Win a Supreme Court Case And Get Nothing



CHARLES DHARAPAK/AP PHOTO

▶ **Plaintiffs get their names associated with landmark decisions but often little else**

▶ **"She is committed to ending for future applicants the unfair and unnecessary use of race"**

In 2008, Abigail Fisher sued the University of Texas to force the school to reconsider her rejected undergraduate application without taking her race into account. (She's white.) On Dec. 9, Fisher's case, which may set an important precedent on the constitutionality of race-based admissions, will be heard by the U.S. Supreme Court. But Fisher, now 25, won't be directly affected by the result when the justices rule next spring. As her claim progressed through the courts, she enrolled at Louisiana State University, earned her degree, and then moved to Austin, where UT is located, to take a job as a financial analyst. Her only direct stake in the outcome of the case is a request that UT refund her $50 application fee and a $50 housing deposit. The university says she has no right to a refund.

Welcome to the world of ideologically driven Supreme Court litigation, where named plaintiffs often play bit roles in battles waged by legal advocacy groups pursuing policy changes. "I don't think anybody thinks Abigail Fisher's attorneys are litigating this case so that their client can get $100," says Richard Re, an assistant professor at the University of California at Los Angeles who specializes in constitutional law and the federal courts. "They're litigating this case because of the principle."

Fisher's suit was the brainchild of Edward Blum, a former stockbroker who now spends his days organizing lawsuits to fight racial preferences and classifications. Blum's one-man operation, the nonprofit Project on Fair Representation, is backed by conservative groups including the Milwaukee-based Lynde and Harry Bradley Foundation and the Washington-based Searle Freedom Trust.

Blum, a former Austin resident who now splits his time between Florida and Maine, spent more than two years trying to recruit a plaintiff for his UT challenge. He set up a website, spoke to student groups, and networked before finally landing on Fisher through her father, a UT alumnus. "Abby continues with this case not in order to seek that monetary restitution, but rather because she is committed to ending for future applicants the unfair and unnecessary use of race at the University of Texas," Blum says. Fisher said in a video provided by Blum that "it's ▶


Blum

◀ really great to have a voice in this and to stand up for an issue that I believe in." She declined to be interviewed.

Blum is behind similar lawsuits filed in 2014 on behalf of a group of unnamed applicants against Harvard and the University of North Carolina at Chapel Hill. Those cases, which are pending at the trial court level, have the potential to wipe out the use of race in admissions altogether.

He's also spearheading a Supreme Court case that could revolutionize application of the "one person, one vote" principle. The appeal, scheduled to be argued Dec. 8, contends that Texas' state senate map is unconstitutional because district lines were drawn to equalize the population in each one, rather than according to the number of eligible voters. A ruling in Blum's favor would usher in a major shift in the standards for determining equal representation. It would also likely give Republicans a boost by reducing representation for heavily immigrant—and Latino—urban areas of Arizona, California, and Texas. The impact, however, would be minimal for the two plaintiffs, Edward Pfenninger and Sue Evenwel, a Republican county chairwoman. Their individual votes would have slightly more chance of swaying the outcome in redrawn districts. Both are represented by Republicans.

Conservatives are hardly alone in pressing cases in which the named plaintiffs have only a tenuous interest in the outcome. Civil rights groups on the left, including the NAACP, have long used test cases to push their agendas. The high court is considering two cases this term where the issue is whether a plaintiff has enough of a stake—or standing—to press a consumer or class-action suit against a business. In one, the court is considering whether a defendant can end a suit that seeks class-action status by offering to pay the named plaintiff in full. The case centers on a man who says he received illegal text messages from a company hired to recruit for the Navy and has refused to accept a settlement offer of more than $1,500 per text. The second fight tests whether Congress can authorize consumers to seek damages even if they don't suffer any concrete injury. In that case, a man is trying to sue an online data broker over an Internet profile he says inaccurately listed him as married, middle-aged, and wealthy.

The question of standing threatened to derail a challenge to the Affordable Care Act heard in March. That case, funded by the libertarian Competitive Enterprise Institute, sought to gut the health insurance subsidies that underpin Obamacare. For plaintiffs, the group recruited four Virginia residents who claimed they would be better off without the tax credits because their incomes would fall below the law's threshold for requiring them to buy insurance policies. In the weeks leading up to the arguments, reports in the *Wall Street Journal* and *Mother Jones* questioned whether any of the four would have in fact been affected by the outcome of the case. The justices devoted 10 minutes of the 80-minute argument to exploring the question, though they ultimately sidestepped that issue and upheld the subsidies.

The issue of standing also hovers over the Fisher case. The university's attorney, Gregory Garre, argues that Fisher can't continue to challenge the admissions policy now that she's a college graduate. He says the application fees aren't enough to anchor her case because they aren't connected to the alleged wrongdoing; Fisher would have paid those even if she had been admitted. "Damages in the amount of the application fees would not make the admissions any more 'equal,'" Garre said in court filings.

The justices first reviewed Fisher's case in 2013 but sent it back to a lower court. That suggests that, at least then, a majority were satisfied that Fisher had an adequate stake. If that's still their opinion, the court might use the case to issue a ruling that broadly restricts affirmative action—and Abigail Fisher might collect her $100. —*Greg Stohr*

The bottom line Plaintiffs in ideologically driven test cases before the Supreme Court often have little at stake personally in the outcome.

Quoted

"This is a work in progress in finding a solution. It's not the end of the problem."

Chicago Mayor **Rahm Emanuel** at a Dec. 1 press conference announcing the dismissal of the city's police chief, Garry McCarthy, amid protests over an officer's fatal shooting of 17-year-old Laquan McDonald

JOEL PAGE/REUTERS

Taxes

Another Way for States To Get Federal Help

▶ **Alabama and Kansas game the Medicaid system to plug budgets**

▶ **Nursing homes "will actually pull down more federal dollars"**

Sam Brownback is among the 19 Republican governors who have consistently refused extra federal dollars under the Affordable Care Act to expand Medicaid for the poor. A Tea Party darling, Brownback of Kansas also cut his state's income taxes three years ago, promising to make up the revenue through increased economic growth that never came. This year, facing a budget shortfall of more than $600 million, he decided to fill some of the gap using a strategy designed to draw more federal dollars to his state—through Medicaid.

Since its inception 50 years ago, Medicaid has been managed by states but jointly funded with the federal government, which matches state contributions at least dollar for dollar. ▶34

Lobbying A Year in the Diet Wars

Every five years, the government updates national dietary guidelines. The latest revision, due this month, will be based on a January report that recommended eating less red meat, less sugar, and less processed foods. That's prompted an effort by the food industry to persuade Congress to block the changes. —*Alan Bjerga*

What the report says

"Think prevention"

"Reducing consumption of red and processed meat" (The 2010 guidelines say, "Select lean meats and poultry")

"Get enough sleep!"

"Less than 2,300mg dietary sodium per day, less than 10 percent of total calories from saturated fat per day, and a maximum of 10 percent of total calories from added sugars per day"

"Make water a preferred beverage choice"

"Limit children's screen time to no more than two hours per day"

"Adults should limit sedentary activity"

"We have strong concerns with the DGAC going beyond its purview of nutrition and health research to include topics such as sustainability"

"We are concerned with the scientific integrity of the DGAC's recommendation to remove 'lean meat' from the statement of a healthy dietary pattern"

Jan. 28
The Dietary Guidelines Advisory Committee (DGAC) submits its report to Agriculture Secretary Tom Vilsack and Health and Human Services Secretary Sylvia Mathews Burwell, the first step to writing the 2015 dietary guidelines, which underpin school lunch and nutrition programs

The problem
"About half of all American adults—117 million individuals—have one or more preventable, chronic diseases that relate to poor quality dietary patterns and physical inactivity"

The cause
"On average, the U.S. diet is low in vegetables, fruit, and whole grains and too high in calories, saturated fat, sodium, refined grains, and added sugars"

Dietary patterns
"Strong evidence shows that it is not necessary to eliminate food groups or conform to a single dietary pattern to achieve healthy patterns"

The individual
"Sound behavioral interventions involve engaging individuals actively in the behavior change process, using traditional face-to-face or small group strategies and new technological approaches (websites and mobile)"

The population
"Research from early child care settings, schools, and worksites demonstrate that policy changes…can increase healthy food choices and overall dietary quality, and improve weight outcomes"

The long view
"Dietary patterns that are higher in plant-based foods…and lower in calories and animal-based foods are associated with more favorable environmental outcomes than are current U.S. dietary patterns"

A battle begins

Feb. 23
Comment period opens

March 12
30
U.S. senators, all Republicans, sign a letter objecting to the DGAC's recommendation to reduce meat consumption and urging Burwell and Vilsack to extend the comment period

April 8
Comment period extended through May 8

April 20
First-quarter congressional reports show
38
companies and trade groups have lobbied on the dietary guidelines

June 16
The House's 2016 draft appropriations bill includes a section stating that no funds will be made available to implement the revised dietary guidelines unless they're "limited in scope to only matters of diet and nutrient intake" and based on
"scientific evidence"

July 20
Second-quarter lobbying reports show
45
groups

Oct. 5
The Senate draft appropriations bill says the guidelines must be "solely nutritional and dietary in nature; and based only on a preponderance of nutritional and dietary
scientific evidence
and not extraneous information"

Oct. 20
Third-quarter lobbying disclosures are filed. Since January
60
groups have lobbied on the dietary guidelines:

Alabama Farmers Federation
America Inc.
American Bakers Association
American Beverage Association
American Dental Association
American Diabetes Association
American Heart Association
American Medical Association
American Public Health Association
Anheuser-Busch
Atkins Nutritionals
Beam Suntory
Beer Institute
Brown-Forman
Center for Science in the Public Interest
Coca-Cola
Consumers Union
Corn Refiners Association
Diageo North America
Distilled Spirits Council of the United States
Florida Crystals
Grocery Manufacturers Association
Hormel Foods
International Dairy Foods Association
Iowa Farm Bureau Federation
Kellogg
Kraft Heinz
Land O' Lakes
Lifeway Foods
Livestock Marketing Association
MacAndrews & Forbes
MacAndrews South
Mars
McGuireWoods Consulting
MillerCoors
Missouri Farm Bureau Federation
National Automatic Merchandising Association
National Beef Packing
National Cattlemen's Beef Association
National Chicken Council
National Council of Farmer Cooperatives
National Kidney Foundation
National Pork Producers Council
Natural Resources Defense Council
National Restaurant Association
Nebraska Farm Bureau Federation
New York Farm Bureau
Northarvest Bean Growers Association
PepsiCo
Red Bull North America
Schwan Food
Smithfield Foods
Snack Food Association
Texas Cattle Feeders Association
U.S. Canola Association
United States Cattlemen's Association
US Dry Bean Council
USA Dry Pea & Lentil Council
Welch's
Wine Institute

Where we are now

The House and Senate are expected to include language limiting the reach of the dietary guidelines in an omnibus appropriations package due to be finalized by Dec. 11. The U.S. Department of Agriculture has said it will release its final guidelines by Dec. 31

States are allowed to cover some of their portion by collecting taxes from Medicaid providers, such as nursing homes and managed-care organizations. That tax revenue allows a state to increase its contribution and attract more federal matching money. In Kansas, Brownback tripled the tax on managed-care groups, to 3.1 percent, and increased state spending by $33.4 million. With a federal match of $1.27 for every dollar Kansas spent, the gambit netted the state a bonus $47 million for its general fund. "This is the first time that I know of that they did this specifically to fill a budget hole, a hole that we created ourselves," says Laura Kelly, the state's Democratic Senate minority whip. A spokeswoman for Brownback declined to comment.

$47 million

Net gain to Kansas's general fund from taxes on Medicaid providers

Forty-nine states charge provider taxes, more than double the number that did so a decade ago, according to the Kaiser Family Foundation, which studies public health-care funding. Six states increased provider levies in 2014, and 11 more proposed increasing them this year, according to the National Association of State Budget Officers.

Provider taxes generated $19 billion in 2012, up from $9.7 billion four years earlier, according to a 2014 report from the U.S. Government Accountability Office. In California, a 2011 nursing-home tax coupled with a hike in reimbursements increased the federal Medicaid match by $80 million. Nursing homes were paid $69 million more, thanks to the higher reimbursements—even after paying the state tax. Illinois cut $5 million from state spending, increased the federal government's Medicaid outlay by $110 million, and netted nursing homes an additional $105 million using the same tactic. "The reality is that these are now part of the fabric of funding Medicaid," says Judith Solomon, health policy vice president at the Center on Budget and Policy Priorities, a Washington think tank. "If you curb them, you are talking about cuts."

In Alabama, desperate lawmakers hiked taxes on nursing homes at the 11th hour to balance the budget in September. Most homes "will actually pull down more federal dollars this way," Republican Mack Butler, a state representative, said in a statement at the time. Lawmakers in the Republican-controlled legislature came up with their nursing-home tax idea after months of disagreement with Governor Robert Bentley, also a Republican, who'd proposed sweeping tax increases to balance the budget. All but three of the state's 228 nursing homes paying the higher tax will benefit from offsetting state and federal Medicaid dollars. "Nobody wants to pay more taxes," says Alabama Nursing Home Association spokesman John Matson, "but knowing the serious shortfall in the state, we wanted to step up." —*Margaret Newkirk*

The bottom line States are filling budget gaps by finding ways to draw more money from the federal Medicaid reimbursement pot.

Campaign Finance

Obama Donors Still Aren't Hot for Hillary

▶ **Only a few of his Chicago bundlers have stepped up so far**

▶ **"I was involved with Barack because I'm close to Barack"**

In 2012, President Obama had 46 individuals or couples in his adopted home state of Illinois who had "bundled"—that is, raised—$100,000 or more for his reelection campaign. So far, just four have collected that much money this year for Chicago-born Hillary Clinton, the front-runner for the Democratic presidential nomination. The gap is roughly the same nationally: About 1 in 10 of those who helped raise at least six figures for Obama's reelection have stepped up for Clinton. "I don't know if I will become a bundler for her," says Alan Solow, a Chicago bankruptcy attorney and longtime Obama backer who raised more than $500,000 in 2012 as a campaign co-chair. "My focus hasn't been as much on the Clinton campaign, but I am a supporter."

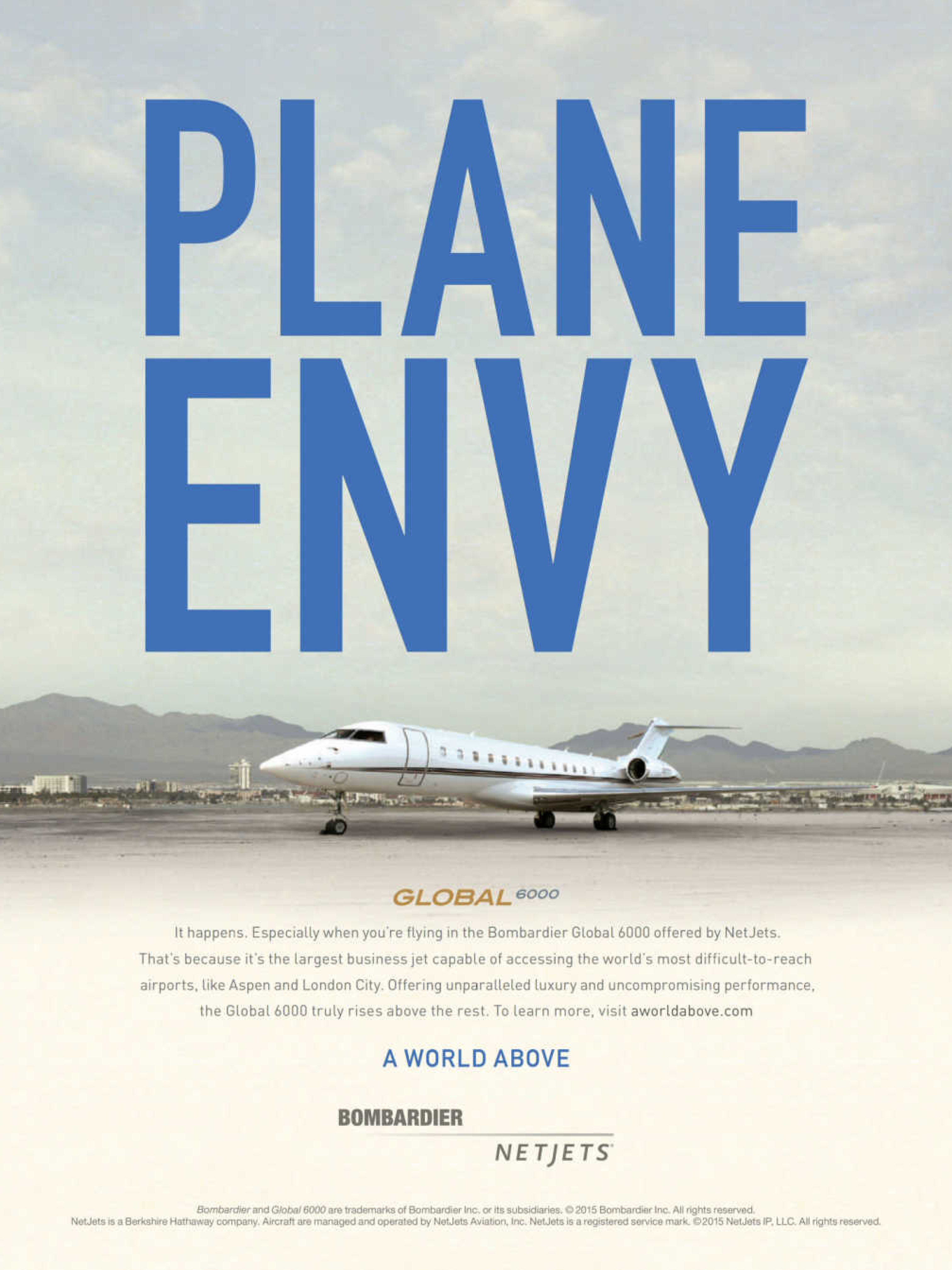
Bundlers, who solicit money from people in their personal and professional networks, are crucial for helping campaigns and parties amass the millions needed to pay for field operations. The expensive work of getting voters to turn out at the polls is generally still handled by campaigns, which are subject to donor contribution limits, rather than by super PACs, which can raise unlimited amounts from each donor.

Obama relied heavily on a close-knit group of Chicago supporters in his 2008 battle with Clinton for the Democratic nomination, so it may be only natural that his longtime allies have been slow to open their checkbooks for her. Judson Miner, a civil rights attorney who hired Obama fresh out of Harvard Law School, says he'll support Clinton in the general election if she wins the nomination, but he doesn't plan to get involved in the primary. "I was involved with Barack because I'm close to Barack," says Miner, who raised at least $200,000 for Obama's reelection campaign. "I would not get involved with Hillary in the same way."

Obama had 601 individuals or couples who raised at least $100,000 for him, according to his bundler disclosures, preserved by the Washington-based Center for Responsive Politics. Heading into the primary season, Clinton's campaign already lists a total of 209 individuals or couples—known in the campaign as Hillblazers—who had raised at least $100,000 through Sept. 30, the end of the last filing period.

Seven are from Illinois, including the four who previously bundled for Obama. They include media entrepreneur Fred Eychaner, a longtime Clinton family patron who backed Hillary over Obama in the 2008 primary race. After Obama secured the nomination, Eychaner contributed money to the future president's campaign and hosted a fundraiser at his home with Michelle Obama. The three others are Raj Fernando, chief executive officer at Chopper Trading; Amalia Mahoney, a philanthropist ▶

PHOTO ILLUSTRATION BY 731; PHOTO: ALAMY


PLANE
ENVY
GLOBAL 6000
It happens. Especially when you're flying in the Bombardier Global 6000 offered by NetJets. That's because it's the largest business jet capable of accessing the world's most difficult-to-reach airports, like Aspen and London City. Offering unparalleled luxury and uncompromising performance, the Global 6000 truly rises above the rest. To learn more, visit aworldabove.com
A WORLD ABOVE
BOMBARDIER
NETJETS
Bombardier and *Global 6000* are trademarks of Bombardier Inc. or its subsidiaries. © 2015 Bombardier Inc. All rights reserved.
NetJets is a Berkshire Hathaway company. Aircraft are managed and operated by NetJets Aviation, Inc. NetJets is a registered service mark. ©2015 NetJets IP, LLC. All rights reserved.

and former art gallery director; and Lee Miller, global chairman emeritus at the law firm DLA Piper, where Obama backer Solow is a partner.

Among cities, Chicago ranks fifth nationally—behind New York, Washington, Los Angeles, and San Francisco—for individual contributions of $200 or more to the campaigns of Clinton and her fellow Democrats Bernie Sanders and Martin O'Malley.

Clinton is working hard to tap into Obama's Chicago network. When former President Bill Clinton started to raise money for his wife's campaign in September, Chicago was his first stop. He's scheduled to make a return visit on Dec. 11 at an afternoon fundraiser hosted by real estate brokers Emily and Thad Wong. —*John McCormick*

The bottom line About 1 in 10 Obama bundlers nationally have stepped up so far to raise more than $100,000 for Hillary Clinton's campaign.

Emissions

Electric Cars Can't Take the Cold

▶ **Batteries generate power less efficiently as temperatures drop**

▶ **"There are distinct and different challenges in the Northeast"**

California's mandatory sales targets for electric and hydrogen-powered cars will go from less than 1 percent today to more than 15 percent by 2025. The targets, the result of legislation passed in 2003, are a means of cutting greenhouse gas emissions to 80 percent below 1990 levels by 2050.

The same targets will go into effect in nine other states that have chosen to adopt California's emissions-reduction standards rather than follow laxer federal rules: Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont. "Electrification is a needed part of the solution," says Matt Solomon, transportation director of Northeast States for Coordinated Air Use Management, a nonprofit consortium representing the air quality agencies of eight states.

The trouble is, except for Oregon, none of the states have California's temperate weather. The batteries used by the greener cars generate electricity from chemical reactions that work less efficiently as temperatures drop. In tests conducted by the American Automobile Association, an electric car that ran for 105 miles at 75F went only 43 miles at 20F—a 60 percent reduction in range.

That's causing anxiety in places such as Maine, a mostly rural state where people drive long distances for work, shopping, and recreation. "People said don't worry about it," says Tom Brown, president of the Maine Automobile Dealers Association of the battery range problem. But, he says, "California is not Maine. They've got more people in five city blocks than we do in the whole state."

In California, which leads the U.S. in sales of zero-emissions vehicles, automakers are on track to meet the mandatory sales targets, which are backed up with fines of $5,000 for every car below quota. Three types of cars on the road today meet the zero-emissions standard: electric-only vehicles such as the **Nissan** Leaf or **Teslas**, hybrids such as the **Chevrolet** Volt that switch between electric and gas power, and hydrogen fuel-cell cars such as the **Toyota** Mirai. (Tesla, which only sells electric cars, has built a side business selling quota credits to other automakers that haven't yet brought zero-emissions models to market.)

Sales in the nine states that have adopted the same emissions-reduction targets haven't kept up and lag behind those in the South, where the weather is better for batteries. "The challenge you face with technology-forcing mandates is picking winners and losers," says John Bozzella, president and chief executive officer of the Association of Global Automakers. "There are distinct and different challenges in the Northeast." Bozzella's group and the Alliance of Automobile Manufacturers

U.S. electric vehicle sales by region

January through September 2015

DATA: IHS AUTOMOTIVE

succeeded in defeating a 2014 attempt by New Hampshire lawmakers to join the rest of New England in adopting the California standards.

Officials are counting on improved batteries to overcome the weather problem. "The longer the range [and] the better the batteries are, the less there's an issue," says Solomon of the Northeast air quality consortium. Tesla, whose electric cars are the most expensive, has introduced models with ranges of up to 200 miles and is promising cheaper models as early as 2016. General Motors says it expects to achieve a similar range with Volts next year. "Two hundred miles will be a game changer," says Roland Hwang, director of the Natural Resources Defense Council's energy and transportation program.

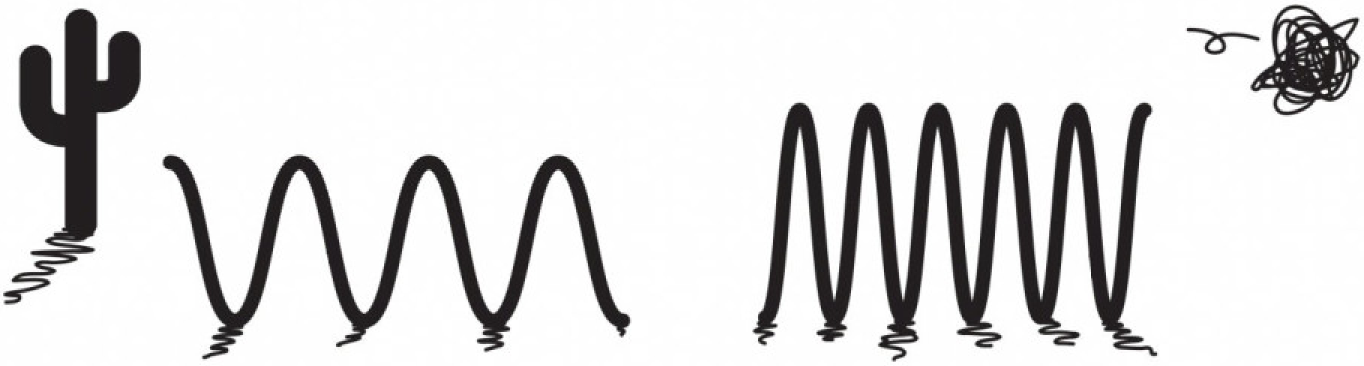
The states following California's lead have pledged to step up construction of charging stations, which would help alleviate the threat of drivers getting stranded with dead batteries. None appear to have any interest in easing up on automakers by relaxing the electric vehicle sales targets, says Peter Iwanowicz, a New York-based environmental lobbyist. "If you have these goals, and that's what the science tells us you have to do," he says, "you need to get moving today." —*Jeff Plungis*

The bottom line Nine states have adopted California's targets for electric car sales, even though the batteries don't work well in the cold.

Edited by Allison Hoffman
Bloomberg.com

ILLUSTRATION BY 731

December 7 — December 13, 2015



‘These airwaves ain’t big enough fer the both of us’

▶ **Google, Microsoft, and Comcast are fighting a Verizon-led push into unlicensed spectrum**

▶ **“The people who have looked at it very carefully are very concerned”**

U.S. wireless carriers send your e-mails and Instagram likes across specific slices of the electromagnetic spectrum: the ones they’re licensing from the government for billions of dollars. But there’s an unlicensed range, and **Verizon** is leading carriers in a push to equip phones with chips that will let them make use of these free airwaves. The company says doing so will help clear cellular congestion and keep the Internet working at top speed as data use climbs ever higher. “Unlicensed spectrum is going to be an important part of providing a better mobile broadband experience for our customers,” says David Young, Verizon’s vice president for public policy.

That sounds great, say **Google**, **Microsoft**, **Comcast**, and others, except for one thing. The proposed system, called LTE in Unlicensed Spectrum or LTE-U, which relies on a combination of new, small cell towers and home wireless routers, risks disrupting the existing Wi-Fi access most people enjoy. For several months, the three companies have been among a group lobbying the Federal Communications Commission to delay LTE-U’s adoption pending further tests. All three declined to comment for this story, referring instead to an Oct. 23 FCC filing they joined that claims LTE-U “has avoided the long-proven standards-setting process and would substantially degrade consumer Wi-Fi service across the country.”

Both sides say they have research backing their assertions about LTE-U; it’s either effective and foolproof or an impending disaster, depending. Both camps are also criticizing the other’s methodology and assumptions, and it’s tough to find an expert who doesn’t have a stake in this argument. So far, the FCC says it intends to let the companies work things out among themselves, though agency spokesman Neil Grace says his bosses are “closely monitoring” the debate.

In decades past, unlicensed airwaves were mostly known for their use by garage door openers, cordless phones, and the occasional baby monitor. Now they’re full of traffic—Wi-Fi networks that connect smartphones, laptops, set-top boxes, game consoles, and a whole host of smart devices to the Internet. Those gadgets and the traffic they carry, an essential part of how Google, Microsoft, and Comcast make money, pump about $222 billion into the U.S. economy every year, estimates industry lobbyist WiFiForward.

Verizon and other wireless carriers run central scheduling software that tells each phone when to transmit on a particular bandwidth, like air traffic control for phone signals. Wi-Fi networks typically rely more on a kind of listen-before-talking system, with each device checking a desired slice of spectrum to make sure it’s available.

“Wi-Fi has this inherent politeness,” says Rob Alderfer, vice president for technology policy at researcher CableLabs, which is funded by cable companies. LTE-U “can essentially take over,” he says, crowding out Wi-Fi signals. Cable industry lobbyist Wi-Fi Alliance says LTE-U should undergo a lengthy approval process to make sure it won’t disturb existing networks.

Verizon and other carriers say delay is pointless—as does **Qualcomm**, ▶

ILLUSTRATION BY 731

◀ which makes the chips that enable LTE-U. "We have a capability that we've proven can coexist, and we're ready to go with it," says Matt Grob, Qualcomm's chief technology officer. "We don't want to wait. Our partners, they don't want to wait."

Paul Nikolich, who heads the Wi-Fi committee for the Institute of Electrical & Electronics Engineers, a standards-setting body, says Qualcomm and the carriers should submit their evidence to his committee for review. That's the usual process for mass adoption of new Wi-Fi technologies, which often takes a year or longer. "The people who have looked at it very carefully are very concerned they will gobble up more than their fair share of spectrum," says Nikolich, a consultant and investor in Essex Fells, N.J.

LTE-U may also act as a disincentive for companies experimenting with Wi-Fi phone calls, including Comcast, and those dabbling in fiber networks, like Google. **Cisco Systems** is arguing both sides, writing in a June filing to the FCC that regulator interference can lead to unnecessary delays but that companies developing technologies rarely prioritize peaceful coexistence with rival systems.

"Wi-Fi is acting as a counter to the consolidation we see in mobile networks," says Dean Bubley, founder and head of consulting firm Disruptive Analysis. Regulators should make sure to keep that counterweight in place, he says, especially since carriers haven't demonstrated serious trouble with cell capacity. "There is a distinct risk of tragedy of the commons here," he says.

At the end of October, a group of chief technology officers and executives from companies including **Time Warner Cable** and **Cablevision**, as well as Google, Microsoft, and Comcast, met with FCC Chairman Tom Wheeler to show him reports they say prove LTE-U would harm Wi-Fi networks. The agency ultimately may have to make the call, says Paul Gallant, an analyst for investment bank Guggenheim Securities. Google and Comcast are planning to offer data-hungry services that rely on Wi-Fi, and they want the FCC to make sure they're protected from interference, he says.

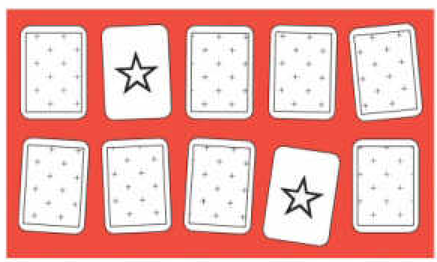
> "Folks, you've got to come together and resolve this in a broad-based standard." —*FCC Chairman Tom Wheeler*

"Folks, you've got to come together and resolve this in a broad-based standard," FCC Chairman Wheeler said at a news conference on Nov. 19 in Washington. Says Grace, the agency spokesman: "If necessary, we will step in." —*Ian King, with Todd Shields*

The bottom line Some of tech's biggest names are squaring off over a new cellular technology that may wreck Wi-Fi networks.

Deals

A Matchmaking App For Companies



▶ **Axial introduces startups to bankers and investors**

▶ **"Smaller brokers typically don't run an efficient process"**

People in the business of mergers and acquisitions or venture capital tend to look at buying, selling, and investing in companies a lot like others look at dating. So it's only natural, says Peter Lehrman, that dealmaking is taking a cue from the wave of hookup apps that have made setting up romantic encounters a lot more like playing a game.

Lehrman is the founder and chief executive officer of **Axial Networks** in New York. Axial's app, launched in September, goes a bit further than other digital M&A and venture capital marketplaces such as Dealnexus and MergersClub. The app lets CEOs plug in their companies' financials and other essential information, then uses an algorithm to match them with bankers, private equity firms, and brokers. (Axial says it keeps the data private.) On both sides of the prospective deal, users can swipe right on their phones to "like" the other company and, if they match, can exchange messages directly. If that sounds familiar, says Lehrman, it should: "It's Tinder," he says.

Unlike investment banks, Axial doesn't take a cut of completed transactions. It makes its money from annual subscription fees of $15,000 to $90,000; some of the service's 1,300 customers pay a premium for dedicated consultants, invitations to conferences, and better data analysis. Axial says its app has helped arrange about 500 deals so far this year, mostly $5 million to $100 million in value. While that's a fraction of the average $5.3 billion transaction **Goldman Sachs** advises on, the software doesn't require plush offices or $1,000 dinners. "I just spoke with a guy who told me, 'I was sourcing deals from my boxers this morning,'" says Lehrman.

Goldman may not have much to fear from Lehrman, but brokers who normally handle sales of small businesses are more vulnerable to being replaced by apps, says Steve Connor, director of business development at Hamilton Robinson Capital Partners, a private equity firm that uses Axial. "Smaller brokers typically don't run an efficient process," he says, partly because they don't have access to wide networks of investors. "Now a single guy can put something out on Axial and get it in front of thousands of potential buyers."

Axial says most of the acquirers using its app so far have been private equity firms focused on small companies. Occasionally, a Fortune 500 company has used it to scoop up a smaller competitor. Axial says its users include **Clorox** and several major banks, but it wouldn't name the banks, and Clorox declined to discuss its use of the app.

A financial analyst by training, Lehrman was a founding employee at Gerson Lehrman Group, where his brother, Thomas, is a director and cofounder. That company uses computer software to connect investors to other professionals. Axial's M&A marketplace software has been online since shortly after its 2009 founding, but the app got Tinderized this year after product director Dan Lee began thinking of it as a mobile in-box for deals. Axial has raised $22 million in venture funding and says it took in about $7.2 million in revenue last year, though it's not yet profitable.

For investors or buyers on Axial, the challenge is keeping prices down,

ILLUSTRATION BY 731

says Connor at Hamilton Robinson. Axial made it possible for his Stamford (Conn.)-based firm to connect with a broker in Duluth, Ga. Otherwise "there was no way we'd ever be calling on a broker in Duluth," he says. But making the scouting process easier means competition becomes fiercer: "As a private equity firm, we like it and we don't like it, because it makes the auction process a little more robust," says Connor.

Chad Elms is less ambivalent about the trade-offs. He signed up in February 2014 for a pricier package from Axial to get more detailed help from staff consultants. A year later, Elms sold 60 percent of his Live Oak (Texas) company, **Momentum Physical Therapy & Sports Rehab**, for $7.2 million to **U.S. Physical Therapy** in Houston, and he credits an Axial consultant who "basically became a friend and part of my team." Adds Elms: "I'd love to meet him one day." —*Alex Sherman*

The bottom line Axial's Tinder-esque interface is making it easier for small businesses to find potential investors or buyers, pushing prices up.

[redacted]

Rocketry

Jeff Bezos Just Ignited A New Space Race

▶ **Blue Origin's rocket landing means fresh competition for Elon Musk**

▶ **"Full reuse is a game changer, and we can't wait to ... fly again"**

For 15 years, Jeff Bezos's **Blue Origin** has been the great mystery of the space industry. Despite backing from Bezos, **Amazon.com**'s chief executive officer, and the occasional test-launch video that wowed techies, the aerospace company didn't seem to be accomplishing all that much compared with Elon Musk's **SpaceX**. Now, though, it's clear that Blue Origin is ready for a bigger spotlight—and that a new space race is under way.

Just before Thanksgiving, Blue Origin sent its *New Shepard* ship into space and brought the rocket back down to earth. Fighting 120-mile-per-hour crosswinds, the craft landed less than 5 feet from where it took off. "Now safely tucked away at our launch site in West Texas is the rarest of beasts—a used rocket," Bezos said in a statement. "Full reuse is a game changer, and we can't wait to fuel up and fly again."

Musk's SpaceX has been the go-to provider of relatively cheap rocket launches, charging about $60 million a pop to get something big into orbit. The hope behind Blue Origin's launch is that reusable rockets could one day bring prices closer to $6 million.

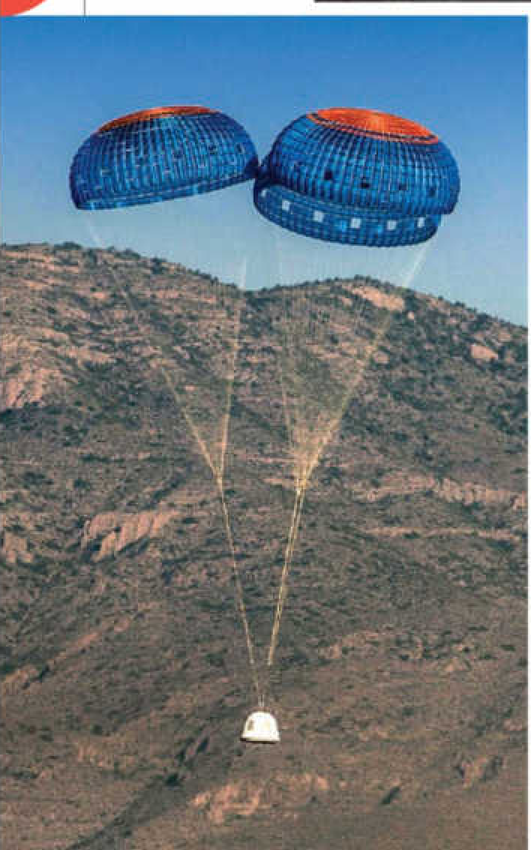
Blue Origin's successful flight comes with caveats. First, it's only a test run. Second, the *New Shepard* craft is aimed more at space tourism—a few minutes of weightlessness—than setting up a satellite or resupplying the International Space Station. It's a lot tougher to land a rocket back on earth in one piece after those kinds of missions. SpaceX has successfully landed its much larger rockets on a test pad after brief flights ▶

Blastoff, rinse, repeat

▲ Blue Origin's reusable *New Shepard* spacecraft rolls toward the company's launch pad in West Texas

► The craft begins liftoff. Its crew capsule climbed to 307,000 feet above earth's surface before beginning its descent

▼ The capsule returns to earth after a clean separation from the propulsion module



▲ The propulsion module contends with heavy crosswinds and lands just a few feet from where it took off

► The Blue Origin team celebrates with founder Jeff Bezos (yes, the one in the cowboy hat)

◄ but has yet to pull off a landing after sending commercial payloads into space.

On Twitter, Musk congratulated Bezos after Blue Origin's success. Then he issued a series of follow-up messages describing SpaceX's quest as a more difficult project and noting that other groups have landed vehicles after "suborbital" flights. Calling Blue Origin a "suborbital" player is a way of saying, "Your engineering's weak, bro."

Since founding Blue Origin in 2000, Bezos has let his team of engineers work in near-total secrecy without worrying about financing. Musk, pressured intermittently by funding concerns at **Tesla Motors** and **SolarCity**, has kept SpaceX going since 2002 by winning aerospace contracts with governments and communications companies around the globe. Deadline pressure paid off: SpaceX has completed about 20 successful missions and has a backlog of flights valued at several billion dollars.

As Bezos edged closer to commercial spaceflight in the past few years, Musk has taken to hurling barbs. In 2013, when they were fighting over access to a NASA launch pad, Musk told *SpaceNews* that Blue Origin had little chance of creating a reliable suborbital spacecraft within five years. "Frankly, I think we are more likely to discover unicorns dancing in the flame duct" of a Blue Origin rocket, he said. SpaceX and Blue Origin have also squabbled over the poaching of employees. At one point, SpaceX set up an e-mail filter to look for anyone receiving a message with "Blue Origin" in the text.

The SpaceX CEO has taken exception, as well, to Blue Origin's attempts to patent reusable rocket technology. "There's no chance whatsoever of the patent being upheld, because there's five decades of prior art of people who proposed that six ways to Sunday in fiction and nonfiction," Musk said in an interview published earlier this year. "It's like Dr.

COURTESY BLUE ORIGIN (5)

Seuss, green eggs, and f---ing ham. That's how many ways it's been proposed. The issue is doing it and, like, actually creating a rocket that can make that happen." Blue Origin didn't respond to a request for comment for this story.

Their engineering spats aside, SpaceX and Blue Origin have opened up the potential for significant advances. Traditional aerospace players such as United Launch Alliance, a Boeing-Lockheed Martin joint venture, and Europe's Arianespace, which had shown almost no interest in pursuing reusable rockets, are researching, or at least talking about, the technology again. It looks as if the U.S., utterly uncompetitive in the global spaceflight market for more than a decade, has the two most promising startups in the industry. All thanks to an online bookseller and that PayPal guy.
—*Ashlee Vance*

The bottom line Blue Origin's successful launch and landing of *New Shepard* raises the pressure on SpaceX to bring its prices below $60 million.

Strategy

From Outsourcing To Consulting

▶ **IT services company Cognizant is trying to take on IBM**

▶ **"Our clients are asking the question, 'Will I be Ubered?'"**

On the penthouse floor of an office building in Midtown Manhattan, **Cognizant** has furnished a suite of rooms with hardwood floors and vintage furniture that wouldn't look out of place in East Egg. Dotting the walls are framed photos of Elvis Costello, Charles Darwin, Martha Graham, and Pablo Picasso, and the office's two terraces have views of the East River and the Chrysler Building. It's a long way from the meeting rooms at Cognizant's headquarters in Teaneck, N.J., and even farther from the cubicles that fill the company's offices in India, where three-quarters of its 220,000 employees work.

The Manhattan setup is part of Cognizant's effort to remake itself as a technology consultant instead of a cheap data-processing workhorse. In India, wages are rising and competition for labor is growing, so hiring tens of thousands of employees each year is no longer a guaranteed way to expand the business. In the U.S., congressional efforts to reduce the number of temporary visas outsourcing companies receive each year would further complicate Cognizant's traditional business model. And worldwide, corporate clients that once relied on outsourcers to manage big SAP and Oracle databases have begun shifting the work to cloud services that require less hands-on management. New demand for the traditional outsourcing work "has ground to a halt," says Bloomberg Intelligence analyst Anurag Rana. "IT budgets at best are flat to slightly up."

And so Cognizant is working to create an image of quality over quantity. The company has 5,500 ▶

consultants, up from fewer than 1,000 in 2010, pitching strategic advice on IT, mergers, and customer service to clients such as the New England Health Exchange Network and Singaporean retailer NTUC FairPrice. The company is still adding workers to its outsourcing business but says it plans to slow hiring. "Five years ago it was more, 'Tell us what to do, and we'll do it well,'" says Cognizant President Gordon Coburn. "Today, we're sitting at the table helping to generate ideas on how you can improve your processes."

So far, Cognizant, which was spun off from credit reporter Dun & Bradstreet in the 1990s, has focused on advising clients concerned that digital upstarts could take away their customers. "Our clients are asking the question, 'Will I be Ubered?'" says Malcolm Frank, executive vice president for strategy and marketing. Thanks to the investments Cognizant has made in consulting, he says, the company's become a good judge of which businesses are at risk.

Cognizant, which posted $10.3 billion in revenue last year, is still small compared with consulting heavyweights **Accenture** ($30 billion) and **IBM**'s services division ($51 billion). But Cognizant's shift toward consulting appears to be paying off: Profit is expected to approach $2 billion next year, up from $1.7 billion this year, $1.4 billion in 2014, and $884 million in 2011, according to data compiled by Bloomberg.

Outsourcing critics aren't impressed with Cognizant's hiring of more full-timers in the U.S. The company's "whole business model is about replacing American workers," says Ron Hira, a professor at Howard University and co-author of *Outsourcing America*. "They're still using the visa programs for cheaper labor and, in many cases, to directly replace American workers." Cognizant says it's creating jobs by hiring locally but often faces a shortage of qualified workers.

22%

Cognizant's projected earnings growth in 2015, according to a survey of analysts compiled by Bloomberg

India's homegrown outsourcers, such as **Infosys** in Bangalore and **Tata Consultancy Services** in Mumbai, are also trying to expand into consulting. In October, Infosys announced the $70 million acquisition of Noah Consulting, an oil and gas industry specialist with offices in Houston and Calgary. Tata in May announced plans to open a design center with the Royal College of Art in London. On Dec. 2, **Wipro** in Bangalore announced a $78 million purchase of German consultant Cellent. The other companies haven't yet had Cognizant's success. Forrester Research now ranks Cognizant among the top five global consulting firms, along with Accenture, IBM, **Deloitte**, and **PwC**. Forrester said in a July report that Cognizant "is gaining traction as an increasingly strong technology-based transformation power."

Cognizant credits its consultants and an added touch of class. In the Midtown office, Senior Director Jay Chittenipat says Cognizant plans to set up similar schmoozing hubs next year in Amsterdam, San Francisco, Singapore, and other cities. "We want people to think differently," says Frank, "and look at problems through a new set of eyes." —*Bruce Einhorn*

The bottom line Cognizant's profit is up an estimated 20 percent this year as the outsourcer shifts more resources to consulting services.

Quoted

"Frankly, it makes me sick that I was able to get all this stuff. VTech should have the book thrown at them."

An anonymous hacker in a chat with a *Motherboard* reporter published on Nov. 30, following his or her theft of more than 190 gigabytes of children's and parents' photos from Chinese toymaker VTech

VTech, which has personal data from about 5 million parents and 200,000 kids, confirmed the breach on Nov. 27 but hasn't commented further

Software

Apps That Fight Your Parking Tickets

▶ **More than two dozen programs offer cheaper legal counsel**

▶ **"People are essentially priced out of lawyers"**

The average American spends about $232 on legal expenses each year, and many attorneys charge $175 to $550 an hour. Among other things, that means people don't hire counsel for minor offenses—only about 5 percent of U.S. traffic tickets are contested in court. "People are essentially priced out of lawyers," says David Houlihan, an analyst at technology-focused Blue Hill Research. Since last year, more than two dozen iOS and Android apps have popped up to try to price more people back in.

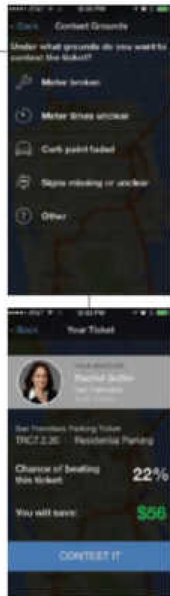
Like online pioneers LegalZoom and Rocket Lawyer, apps including **GetDismissed**, **LegalTap**, **WinIt**, and **Fixed**—the last specifically designed to fight parking and traffic tickets—promise users relatively cheap and easy legal counsel. Some offer brief chats with lawyers, others work on a contingency basis, and still others rely primarily on software that can detect potentially dismissal-worthy errors in legal paperwork. "These kinds of applications work to increase access and availability," Houlihan says. Some are also referring users to legal counsel in cases involving business incorporation, employment contracts, and other matters.

LegalTap, launched in June, charges $39 for a 15-minute chat with a lawyer. It's already set up about 1,500 such videoconferences with 55 attorneys. WinIt, released in March, has fought

COURTESY FIXED (2)

more than 10,000 parking tickets in New York and says it'll expand to traffic tickets and legal referrals within a year. GetDismissed, which went live in February, claims more than 1,000 clients "regularly" use its services.

Fixed, launched in San Francisco in May 2014, says it's beaten about 10,000 of 60,000 parking and traffic tickets in Los Angeles, New York, Oakland, and San Francisco. The app refers traffic tickets to local law firms—its go-to is California Traffic Defenders, which charges $150 for most tickets. For about a year, Fixed successfully used automated software to find errors in parking tickets that users uploaded using smartphone cameras, charging 35 percent of dismissed fines.



"Here's a service that makes it easy for people to get help," says Robert Amparan, an attorney at California Traffic Defenders. Amparan says his office usually gets 10 to 20 referrals a day in total. The first day his firm was linked on Fixed, the app sent him four.

Within five to seven years, apps stand to add about 15 percent in revenue to the slow-growing $25 billion legal-services market for consumers and small businesses, says Michael Rynowecer, president of BTI Consulting Group. Ariel Ovadia, a 33-year-old fashion designer in Manhattan who used WinIt to fight 10 tickets in the past six months, says he's been praising the app to anyone who'll listen. "It's got to be in my two, three favorite apps," he says, "because it saves me money."

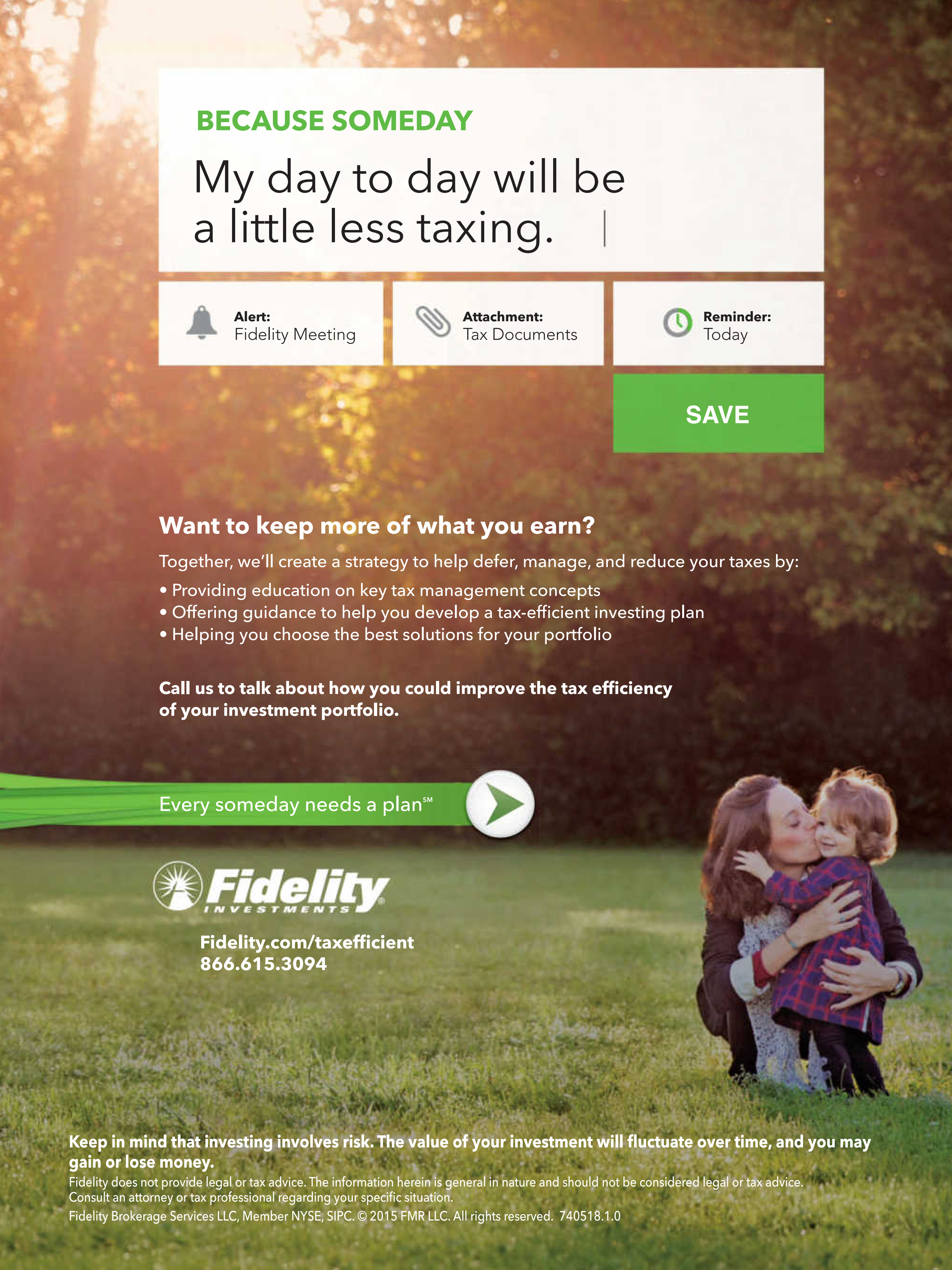
LegalTap co-founder Billy Canu acknowledges the startup's business model doesn't exactly draw the busiest of corporate lawyers. "Obviously, if you are a big lawyer working on huge deals for Apple and Microsoft, this might not be a service for you," Canu says. "This is geared toward a lawyer who's a stay-at-home parent or wants to surf all day."

Some of the apps are struggling to fit in with established municipal services. Fixed has temporarily stopped processing parking tickets because, it says, San Francisco's payment-systems makers have been making it tough to challenge tickets using Fixed's company credit card or its IP address. "It now requires the majority of our engineering team to circumvent the blocking," says David Hegarty, Fixed's chief executive officer.

Paul Rose, a spokesman for San Francisco's Municipal Transportation Agency, says the MTA has staff on hand to help process Fixed submissions online or by hand, instead of directly through the payment software. "It becomes uneconomical for us," says Hegarty. So far, though, he hasn't turned to any of the other apps for help. —*Olga Kharif*

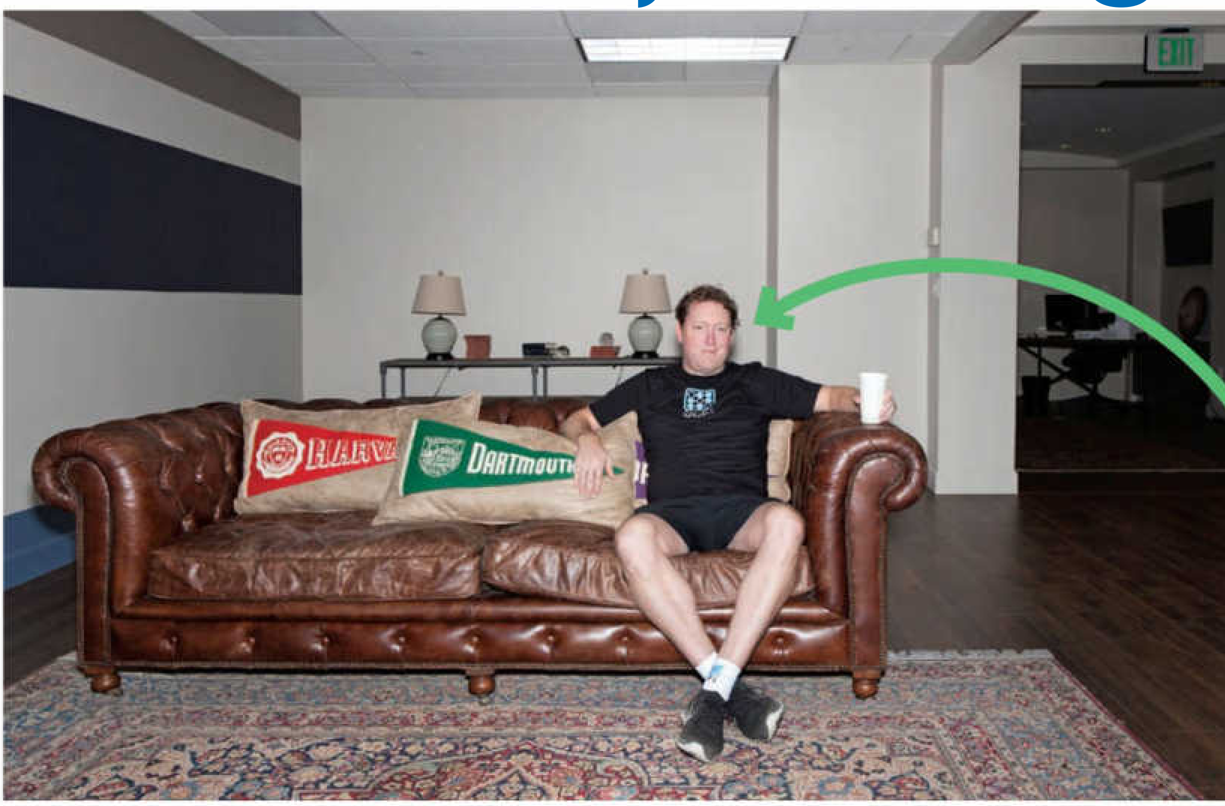
The bottom line Using discount legal advice or algorithms, several new apps have helped beat thousands of parking tickets.

Edited by Jeff Muskus
Bloomberg.com


BECAUSE SOMEDAY
My day to day will be
a little less taxing.
Alert:
Fidelity Meeting
Attachment:
Tax Documents
Reminder:
Today
SAVE
Want to keep more of what you earn?
Together, we'll create a strategy to help defer, manage, and reduce your taxes by:
• Providing education on key tax management concepts
• Offering guidance to help you develop a tax-efficient investing plan
• Helping you choose the best solutions for your portfolio
Call us to talk about how you could improve the tax efficiency of your investment portfolio.
Every someday needs a plan℠
Fidelity INVESTMENTS
Fidelity.com/taxefficient
866.615.3094
Keep in mind that investing involves risk. The value of your investment will fluctuate over time, and you may gain or lose money.
Fidelity does not provide legal or tax advice. The information herein is general in nature and should not be considered legal or tax advice.
Consult an attorney or tax professional regarding your specific situation.
Fidelity Brokerage Services LLC, Member NYSE, SIPC. © 2015 FMR LLC. All rights reserved. 740518.1.0

December 7 — December 13, 2015

Watch Out, JPMorgan! This Guy Wants to Kill Banks



PHOTOGRAPH BY EMILY BARRESI FOR BLOOMBERG BUSINESSWEEK

▶ **Mike Cagney's SoFi courts millennial borrowers with TLC and cocktail parties**

▶ **"I never expected" a lender "to call me and say, 'Come hang out with us, we are building community"**

At the Happiest Hour, a cocktail lounge in downtown Manhattan, a group of twenty- and thirtysomethings lined up on a recent Friday to enter a private party. When Azdar Baghirov made it inside, he couldn't quite believe what he saw: platters of mini grilled cheeses, burgers, and BLT sandwiches, interspersed with trays of jalapeño tequila and vodka-cucumber cocktails, all free. Baghirov was invited because several months earlier he decided to take out a personal loan from **Social Finance**, a four-year-old nonbank lender known as SoFi. "I never expected an event from a lender, to call me and say, 'Come hang out with us, we are building community,'" said Baghirov, an IT system administrator. "Honestly, this is unbelievable."

SoFi rented the space to thank its borrowers—and encourage them to join in the company's campaign to, in the words of Mike Cagney, its chief executive officer, "kill banks." The company gained popularity by refinancing student loans taken out by graduates from top universities, but it quickly started to pursue a more ambitious vision. In the past year and a half, SoFi began making personal loans and mortgages. It's soon planning to roll out a wealth-management tool, insurance products, and something that resembles a checking account.

The company is betting that by making millennials feel as if they belong to an exclusive club, it can turn an entire generation into lifelong customers. "We've always wanted to change the system," says Cagney, a former Wells Fargo derivatives trader with a Stanford business school pedigree. "We can do some things that really get you to start to rethink how your relationship ▶

with a financial-services firm should work." If he has his way, banks as we know them will someday be extinct. "We're trying to make these guys dinosaurs," Cagney says. "And hopefully I'm the meteor by which they all die."

Some venture capitalists are buying in to his vision. SoFi says it became profitable in 2014, and in September it raised $1 billion from a group of investors led by **SoftBank**, the Japanese telecom and Internet company. Others have been lining up to buy the bonds backed by portions of the $6 billion in loans SoFi has issued.

Although Cagney stands out for his bluster, he's just one of dozens of entrepreneurs with dreams of "disrupting" financial services by offering better service, mobile access, or more tailored financing options. Whether he or the others will be able to create significant businesses isn't clear. The big lenders have superior resources and will try to adapt, says Bert Ely, an independent banking consultant. And some may forge partnerships with the new entrants. Online lender **OnDeck** recently announced that it's teaming up with **JPMorgan Chase** to make small business loans. "A lot of the upstarts will disappear," Ely says. "It's tough in financial services to break through in a really meaningful way."

For SoFi, making it big may mean losing the bespoke charm that made it so popular in the first place. The company doesn't operate an expensive network of branches, and its application process is online. Still, it provides its members with labor-intensive handholding. SoFi already has hundreds of employees at a call center in the heart of Sonoma County wine country, where local caterers bring in lunch every day.

There are other risks. When the Federal Reserve begins raising interest rates, possibly this month, SoFi could find it harder to offer competitive terms. Federal student loans are 4.29 percent for undergraduates and can climb as high as 6.84 percent for some loans for graduate and professional studies. For student loan refinancing, SoFi offers fixed rates as low as 3.5 percent and variable rates starting at 1.9 percent.

"I don't like to use the word 'banking.' It just perpetuates the need for those things to exist"

Although SoFi dominates the student loan refinancing business, newcomers are vying for a piece of the market. **Earnest** just raised $275 million. **CommonBond**, which was founded by Wharton MBAs, has started securitizing loans and says it will have funded more than $500 million in debt by yearend. Banks such as **Citizens Financial Group** are also active in offering refinancing.

SoFi has had some success rolling out mortgages and personal loans, which now account for about half its business. But as big banks have learned over the years, persuading customers to get other products can be tough. "Generally speaking, the cross-selling opportunity is usually a little inflated," says Michael Tarkan, an analyst at Compass Point Research & Trading.

And as SoFi does more things that banks do, it runs the risk of becoming regulated like one. Cagney has an almost allergic reaction to the thought. "I don't like to use the word 'banking,'" he says. "It just perpetuates the need for those things to exist." Even so, he's not taking chances. He hired Sullivan & Cromwell Senior Chairman H. Rodgin Cohen, one of the top banking lawyers on Wall Street, to help SoFi think through its approach.

Banks have little incentive to innovate, Cagney says. Federal deposit insurance "gives them this lifeline that allows them to exist with crappy products and substandard delivery and branches and all this stuff that nobody wants." Of course, there are some upsides to steering clear of a bank charter. SoFi holds lending licenses in dozens of states. But because it doesn't take deposits, it doesn't have to answer to federal regulators that tell banks how much capital to hold. Banks also have to serve low-income areas through their branches.

For now, SoFi is focusing on bonding with its borrowers. The open bar in New York was one of 45 customer events SoFi hosted this year. The company refers to its more than 85,000 clients as members and does its best to make it seem as if taking out a loan from SoFi offers entrée into an exclusive association of strivers. Part of that image comes from SoFi's business model. Rather than focus on conventional metrics such as credit scores and debt-to-income ratios, it looks for borrowers who earn more than they spend, work in lucrative professions, or hold degrees in fields that promise consistent paychecks, such as nursing.

When borrowers lose their jobs, SoFi allows them to stop making payments temporarily and lands them interviews with potential employers. If a customer wants to start a business, SoFi provides a six-month break from loan payments—and makes introductions to venture capitalists.

The company is also counting on its members to start organizing themselves. After a recent event in Philadelphia, a group of borrowers got together to go bowling, all on their own. Another in Berkeley created a Facebook page to stay in touch after dinner.

If all the clubbiness has a whiff of elitism, that doesn't seem to bother Baghirov or the other hundred-odd people at the Happiest Hour. As Baghirov bit into a smoked fish appetizer, SoFi's co-founder, Dan Macklin, extended his hand across the plush booth. "Are you a member?" Macklin asked. Baghirov said he'd taken out a personal loan with the company. "Yeah, that means you're a member," Macklin said, energetically. "That's a badge of honor!" —*Noah Buhayar and Natalie Kitroeff*

The bottom line SoFi has lent $6 billion to borrowers it treats like members of a club, hoping to make them customers for life.

Divestment

Ragtag Activists Push Banks to Dump Coal

▶ **Plunging prices help make the argument persuasive**

▶ **"They're aware that they're exposed reputationally"**

The anti-coal protest outside **Morgan Stanley**'s 42-story tower in New York attracted only three people—four if you count the infant one of them happened to be baby-sitting. The few bankers who walked outside to meet restaurant deliverymen appeared to barely notice

Stocks The Hazards of Following Hedge Funds

Exchange-traded funds that buy stocks favored by hedge funds may thrive in rising markets, but in a downturn they can't act as quickly as hedge funds and can be stuck with losers. —*Joseph Ciolli*

Copycats

AlphaClone tracks the performance of U.S. stocks in which hedge funds and institutional investors have disclosed they have "significant" holdings. Global X buys the top holdings of hedge funds as disclosed in regulatory filings.

S&P 500 **+1.4%**

Global X Guru ETF **-7.8%**

AlphaClone Alternative Alpha ETF **-10.6%**

DATA COMPILED BY BLOOMBERG

as the activists sang, "Go tell it on the mountain. Your bank poisons us." It was all over in 15 minutes.

The Nov. 19 demonstration hardly seemed like the kind of thing that would lead an investment banking behemoth to stop putting money into fossil fuels. But the movement that sponsored it is getting results. Two weeks after the protest, Morgan Stanley declared it would cut funding for coal mining and promised to consider the perspectives of environmental groups in financing decisions. It declined to comment on the activists. Eight other global banks have made similar commitments this year. That goes beyond what many pension funds and college endowments have done. Harvard's president has dismissed students' calls for coal, oil, and gas divestment.

"New coal mines and new coal-fired power plants can't be built without the behind-the-scenes support of major financial institutions," says Ben Collins, senior research and policy campaigner at the Rainforest Action Network. "They're aware that they're exposed reputationally on this issue."

> **"When something like this is opened up to retail investors, they tend to get the worst out of the deal."**
> ***—Bill Schultz, chief investment officer, McQueen, Ball & Associates***

Power plants that burn coal generate about 40 percent of the electricity used in the U.S. and around the world, and the World Coal Association says there's enough in the ground to last 110 years. The protesters' goal is to keep that coal underground by preventing mining companies from raising the money they'd need to dig it up.

Bank of America was among the activists' first targets. They hung anti-coal banners across from the bank's headquarters in Charlotte in 2007 and at the Bank of America stadium, where the Carolina Panthers play, in 2012. Dozens of protesters were arrested for blockading bank branches in other actions, and college students disrupted several on-campus recruiting events. Initially, the bank said it was diametrically opposed to the environmentalists' positions, according to the Rainforest Action Network. Then in May, it adopted a new policy, citing pressure from activists. The bank, which didn't frame the move as a reversal, said it "will continue to reduce our credit exposure to coal extraction companies." The bank declined to comment.

Nov. 19 protest in New York

Citigroup, also the target of environmental protests, announced its own plan this year to reduce coal lending, as did **Wells Fargo**, **ING Group**, and the French banks **Crédit Agricole**, **Société Générale**, and **BNP Paribas**. At the time, Jean-Laurent Bonnafé, BNP's chief executive officer, called the change "an environmental and economic necessity." The announcements were short on specifics, and because the move away from coal financing is so recent, it hasn't yet shown up in industry data.

The banks may have a less-than-altruistic reason for changing their stance: Coal has been a terrible investment lately. With some utilities switching to cheaper, cleaner natural gas, a coal benchmark price fell to $53 a ton in December, the lowest since at least 2008, and down from a peak of $139 a ton in 2011. At the Paris climate talks, world leaders are debating emission reduction targets that may require drastic cuts in coal use. Three big U.S. coal companies, **Patriot Coal**, **Alpha Natural Resources**, and **Walter Energy**, filed for bankruptcy this year.

Thermal Coal Price Per Ton

Robert Murray, the CEO of coal producer **Murray Energy**, says the banks are making empty promises. When his company issued $1.3 billion of high-yield bonds in April, **Deutsche Bank** underwrote the offering together with **Goldman Sachs**, which later pledged to be "selective" about coal financing. He says banks won't cut off mining companies like his, which have profitable ▶

ERIK MCGREGOR/DEMOTIX/CORBIS. COAL DATA COMPILED BY BLOOMBERG, NEWCASTLE AUSTRALIA PORT PRICE

◀ prospects. "The whole movement is more politics than real concern about their coal investments," he says. "In virtually every case where they have said that they would turn away from coal investments, they always left some sort of a hedge in there that allows them to do otherwise." Deutsche Bank and Goldman Sachs declined to comment.

Still, dumping coal may just be good business, says Jonathan Finger, whose family-owned investment firm, Finger Interests, has stock in BofA, Citigroup, and **JPMorgan Chase**. "I don't think it is necessarily fair to assume this is a disingenuous effort," he says. "Many existing and would-be customers for large banks have concerns about climate change. Banks, especially retail-oriented banks like Bank of America, are concerned about their reputation and image with consumers." —*Zeke Faux*

The bottom line On Nov. 30, Morgan Stanley said it would reduce funding for coal mining projects, joining eight other global banks.

Investment Banking

India's King of Internet Finance

▶ **A man who didn't want to be a banker helps startups raise cash**

▶ **"We found ourselves in the right place at the right time"**

When Aashish Bhinde graduated from one of India's top business schools 20 years ago, he was sure of one thing: He wanted to steer clear of a career in finance, with its long hours and endless number crunching. Today, Bhinde, 44, is India's top dealmaker for the country's booming technology startups. His 19-person team at **Avendus Capital** has advised on more Indian Internet deals than any other bank, according to data compiled by Bloomberg. In October private equity firm **KKR** agreed to buy a 72 percent stake in Avendus, giving it a value of $185 million. "A lot of what we've achieved is because the markets have done extremely well and we found ourselves in the right place at the right time," Bhinde says. "We were early to the party and saw

Avendus Capital

Founded 1999
Headquarters Mumbai
Valuation $185m
Majority owner KKR

Tech leader
Advised on 33 deals in four years with a total value of
$1.75b

70%
Share of the firm's revenue from advisory fees

Indian e-commerce gross sales
Merrill Lynch projection

ourselves as somebody who is helping build the ecosystem."

In 2011, Avendus was among the first investment banks to focus on e-commerce. That early start helped Bhinde and his team establish relationships with venture capitalists, private equity firms, and fresh-out-of-college entrepreneurs before the pace of funding picked up and large global investors came calling. Avendus advised on 20 Internet fundraising deals totaling $1.1 billion in the past four years. The total rises to $1.75 billion with the inclusion of 13 transactions in related fields such as payments technology, logistics, and entertainment. **Deutsche Bank**, No. 2 in India, notched only one during that time, worth $700 million. This year, Avendus has helped music streaming service **Saavn** raise $100 million from a group of investors led by **Tiger Global Management** and advised ride-hailing service **TaxiForSure** on its $200 million acquisition by **Olacabs**.

After getting an MBA from the Indian Institute of Management in Kolkata in 1995, Bhinde worked at Colgate-Palmolive in sales and marketing for two years, then left for a startup that built speakers. Three years later he started his own audio company, which shut down in 2001. He took a job managing investments for a private equity firm that had put money into his startup. While negotiating a deal, Bhinde met Avendus co-founder Gaurav Deepak, who recruited him into Avendus's technology practice in 2006.

Initially the work consisted of advising software exporters and back-office outsourcing companies on mergers and acquisitions. In 2011, Deepak asked Bhinde to help the firm win assignments from e-commerce and digital companies that were trying to raise money. **Flipkart Online Services** had shifted from being a bookseller into selling electronics, and venture capital firms were funding dozens of e-commerce startups selling everything from apparel to furniture. Yet no one seemed to have a handle on the business. "When we spoke to companies, nobody knew where to classify themselves, how to explain the structure of the industry," Bhinde says.

> **"When we spoke to companies, nobody knew where to classify themselves, how to explain the structure of the industry."**
> **—*Aashish Bhinde, Avendus Capital***

He and his team researched the industry, producing "India Goes Digital," a 168-page report detailing Internet usage patterns, smartphone penetration, e-commerce growth, and the evolving cashless payments landscape. The 2011 report projected that sales by Indian e-tailers would soar, to $11.7 billion in 2015, from $819 million in 2011. The report was far more optimistic than one released the same year by the Associated Chambers of Commerce of India, which estimated that e-commerce sales would amount to only $1 billion by 2017. The Avendus prediction was almost spot on: India's e-commerce companies will sell about $11 billion in goods this year, and that figure is expected to grow to $220 billion by 2025, **Bank of America Merrill Lynch** said in a recent report.

Although Avendus has mainly been helping startups raise money, Karan Sharma, an investment banker on Bhinde's team, expects that to change as the industry grows. At least 113 technology startups have been acquired this year, compared with 50 last year, data from Tracxn show. "We are going to see massive consolidation," Sharma says. "There are a lot of companies that have gotten funded sizably, and more importantly, there are companies that have the size to acquire" smaller rivals. —*Adi Narayan*

The bottom line Avendus has become India's leading Internet banker, advising on 33 deals over the past four years.

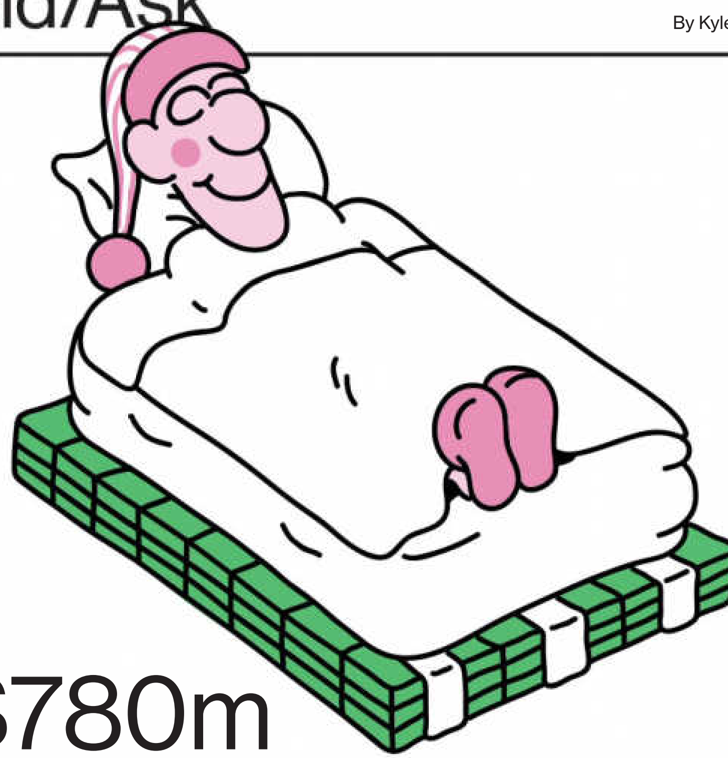
Edited by Eric Gelman
Bloomberg.com

DATA: BLOOMBERG


Potential. Delivered.

Bid/Ask

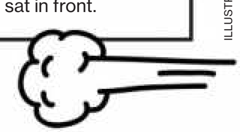
By Kyle Stock



$780m

Mattress Firm snags Sleepy's. The deal combines the two largest mattress retailers in the U.S., comprising 3,500 stores and 80 distribution centers. Sleepy's gives its new parent a bigger presence in New England. As e-commerce startups such as Casper and Saatva enter the business, Mattress Firm has been on a shopping spree. Sleepy's is the 18th rival the company has bought since 2007.

$575m	**WellStar Health System acquires five Atlanta hospitals.** The Tenet Healthcare purchase gives WellStar 1,192 beds and 1,390 doctors, plus 26 clinics and two trauma centers.
$400m	**A Chinese consortium buys 13 percent of Manchester City Football Club.** China Media Capital and Citic Capital are investing as the club expands in the U.S. with New York City FC.
$360m	**BRF swallows Golden Foods Siam.** BRF, Brazil's largest chicken exporter, is expanding overseas with the purchase of the Thailand-based poultry processor.
$180m	**Perion Network buys Undertone.** The acquisition gives Perion, an Israeli marketing company, access to the booming digital ad market, which Undertone serves from New York.
$20m	**IMG wins the Copa América.** The conglomerate teamed with the company behind Major League Soccer to bid on the 2016 soccer tournament.
$11m	**Olga's Kitchen gets a new chef.** The famed chain of about 25 Greek restaurants in and around Detroit was bought at a bankruptcy auction by Team Schostak Family Restaurants.
$86,250	**Herbie the Love Bug rolls off the auction block.** The vehicle, owned by Turner Classic Movies, had been modified so a driver could sit in the back seat while a cameraman sat in front.



ILLUSTRATIONS BY OSCAR BOLTON GREEN


© 2015 Optum, Inc.
EXPERTS
COLLABORATING
ON CARE IS WHAT WE CALL
A HEALTH CARE
COMMUNITY

The Good Business Issue

We sought out companies trying to do good while doing well, hoping to fill a special issue. It didn't take long. Everlane, which is staying true to its pledge of supply-chain transparency as it expands its apparel lines, invited us to tour the factories it uses in China. Dow Chemical, still infamous to many for concocting Agent Orange, the toxic defoliant used in Vietnam, has found a way to turn sewage into drinking water—and gave us a taste.

M-Kopa Solar is bringing electricity to rural Africa while aiming to become a billion-dollar company. The motives for doing good can be complicated—see the story behind Gravity CEO Dan Price's decision to raise base pay to $70,000. Sometimes doing the right thing even requires becoming an outlaw—meet Ben≈Ayers of the Dzi Foundation. If our reporting proved anything, it's that good business isn't an oxymoron.

Illustrations by Nejc Prah

Making Ethical Chic

Everlane goes to China to pick a new bag factory

By Susan Berfield

Photograph by Sarah Anne Ward

Michael Preysman has come to China on a warm day in October to confront a young executive whose family owns the Dongguan factory that makes his popular backpacks. Preysman is the fast-talking founder and chief executive officer of Everlane, the five-year-old online clothing company committed to, and capitalizing on, "radical transparency" about where its shirts, sweaters, T-shirts, pants, coats, shoes, and bags are made and how much they cost to make. Its influence is greater than its size suggests: Everlane has been called "the Internet's smartest clothing brand" (*Fader*) and the next J.Crew (Racked). "We want the look of Céline and the ethics of Patagonia," Preysman says.

In May 2014 the Dongguan factory shipped almost 1,000 Everlane backpacks with the strap buckles on backward, and they went out to customers without anyone noticing. The company had to recall the bags. Preysman is also concerned about the factory's low score on a recent audit of its working conditions.

"I had to tell him he's our No. 1 problem," Preysman says shortly after a meeting with the executive. "We're his smallest client, so I thought maybe he just doesn't care," he adds. "But he says he wants to keep our business." Preysman is visiting two other factories on this trip; Everlane will select one to take over some—or all—of its bag production if it doesn't keep all its business in Dongguan.

The executive and the rest of the factory owners asked to remain anonymous so as to not upset their bigger clients, well-known American and European luxury brands. But, at Preysman's request, they allowed me to join a tour of the facilities and to record what Preysman has staked his company's reputation on: namely, that people can feel good about what they buy from Everlane, because they can see, on the website, the factories, workers, production costs, and Everlane's markups.

With Preysman are two Everlane executives, Rebekka Bay and Kimberley Smith, as well as four merchandising and production managers. That's 10 percent of the staff. Bay, who helped create COS, the minimalist clothing line owned by H&M, and led the Gap's design team for two years, joined Everlane as head of design and product in August. Smith, the head of production and sourcing since the spring of 2014, has two decades of experience finding and working with apparel factories.

Dongguan, south of the Tropic of Cancer and close to the Pearl River, hosts a sprawling network of factories. The complex that Preysman and his team are visiting also includes a five-story dormitory and canteen designed by the South Korean owner, as well as a basketball court. The factory owner was the first in China to sign on with Everlane and produces "weekender" and tote bags, too. But then there was the buckle debacle. As Everlane improved the bags, the factory sometimes struggled to keep up. In the spring of 2015, Everlane hired an auditor to inspect its factories, focusing on safety and health requirements, as well as workers' wages and quality of life. The Dongguan factory had the worst score of the five in China that were audited. A second audit didn't go much better. The main issue has been the factory's records, especially when it comes to overtime. The hours worked don't match the wages paid. That's not good, Smith says, but maybe not as bad as it sounds: "The biggest thing for them is reconciling their paperwork," she says.

It takes about 15 minutes to tour the main factory floor, where workers in light blue shirts cut and stitch under fluorescent lights. The executive overseeing the factory (and several others in Asia) is the son of the founder. As he walks past a line of women seated at sewing machines, he describes an incident that occurred last year. Workers went on strike, demanding that he fire the manager, a South Korean woman, for berating them. After two days, the workers gathered outside the executive's office and wouldn't let him leave. He didn't agree to fire the manager, but promised she would treat them better and offered to pay them for one day's work. "It wasn't pretty," the executive says. Preysman sighs when I mention this. He knows about the episode.

As we walk through the cafeteria, Preysman stops by the staff preparing dinner. We share a red bean bun. "That's pretty good," he says. He takes a photo.

Everlane wants to post audit scores and update its line of bags, so Smith has been looking for alternatives to the Dongguan factory. Getting into a good one in China isn't easy for small companies, and if they're not recommended, they often get nowhere at all. Some factories didn't even respond to Smith's inquiries.

Even if clothing companies don't want to boast about how good their suppliers are, they should know how efficient they are. A company's supply chain can be one of its biggest vulnerabilities. Everlane is hoping its factories can be one of its greatest strengths.

Preysman was 25 years old with a degree in computer science and some experience in private equity when he founded Everlane in 2010. He's confident and quick to take chances. He agreed to let me join the trip to China after a 20-minute discussion, our first. The next time I saw him we

"They have a missionary, not mercenary, approach to their business"

Elena Rodriguez, a production manager; Bay; and Preysman in the Shenzhen factory

were jet-lagged and eating breakfast in a hotel in Shenzhen. He came over to my table and gave me a hug. That morning and for much of the two days we were together, he carried his phone, passport, credit card, and hotel key in his hand as if he didn't have pockets.

Preysman tells me he doesn't keep any photos or mementos in his San Francisco loft. For a while he just had a bed and empty white walls. He's interested in function and systems, not fashion. When Bay says she brings a mathematician's mind to design, he smiles. "I love when she talks about grids."

Preysman understands brands. "Everything is always about the product and ideas and stories that we can tell," he says. When he started Everlane, he wanted to offer high-quality clothes at lower prices by operating online only. He secured $1.1 million from Kleiner Perkins Caufield & Byers and several investors. Everlane became a Silicon Valley rebuke to traditional retailers: no stores, no collections, no discounts. Everlane's aesthetic was pared down, too.

In 2011, when Everlane went live, Preysman put some numbers on Everlane's Facebook page. He figured the cost of making a T-shirt at a Los Angeles factory was $6. He said the price of a similar shirt at a traditional retailer was $45. The price at Everlane: $15. Publicizing information that some retailers consider a trade secret helped Everlane gain a following and more funding. Preysman has raised $9 million so far. He and his employees own a majority of the business.

Everlane is in good company: Toms Shoes started the buy-one-give-one business model and today sells bags, clothes, eyewear, and coffee while committing to having a "responsible" supply chain. Warby Parker sells fashionable glasses for $95; now it's worth $1 billion. Everlane's transparency has limits, though. The company says it doesn't publish the names of its factories on its website for competitive reasons. The auditing firm agreed to let Everlane link to its factory reports on the condition that Everlane remove the auditor's name from the documents and not use it anywhere else.

And Preysman no longer shares Everlane's sales. He said they were $12 million in 2013, and double that in 2014. PrivCo, a firm that tracks private companies, estimates Everlane's revenue could be $35 million this year. Preysman will say only that the company is reinvesting and breaking even. Everlane has about 200 styles on its website and 300,000 customers.

"They have a missionary, not mercenary, approach to their business," says Sucharita Mulpuru, a retail analyst at Forrester Research. "Typically, those businesses stay small." But Preysman and Bay don't want Everlane to stay small.

When Preysman began courting Chinese factories in 2012, he and his original production manager were often ignored. Even now, "they want to see that we're not a headache," Smith says. "They're vetting us just as much as we're vetting them."

In April 2013 the Rana Plaza in Bangladesh collapsed. More than 1,100 workers in factories that supplied clothes to American and European retailers died. →

PREVIOUS PAGE: SPECIAL EFFECTS BY DCOY; THIS PAGE: PHOTOGRAPH BY ADAM DEAN FOR BLOOMBERG BUSINESSWEEK

Many companies promised to improve their auditing. Preysman saw an opportunity. He put photos and videos of workers and factories on Everlane's website with the tagline "Every factory has a story." Eventually, Everlane added the cost breakdown for every product.

Apparel audits have become so expected that some factory managers coach employees and keep a second set of books to hide violations. "Even quality audits and a relationship with the factory only get you so far," says Sarah Labowitz, co-director of New York University's Stern Center for Business and Human Rights. "You have to tie compliance to business incentives. If a supplier improves working conditions, they get bigger and longer-term orders."

Everlane wasn't the first to publicize its supply chain, but it remains one of the few fashion brands to do so. The company has tried to customize its audits so it gets information about median wages, the highest and lowest salaries, and how those break down by gender. "We ask if the dorms have hot water, heating, air conditioning," Smith says. Factories have to be willing to be photographed and have their costs and audit scores made public—all for a customer that could be their smallest.

The numbers aren't always as precise as Everlane wants. "Factories can pad costs all over the place," Smith says. Everlane's most effective pitch is that when it can see the real costs, it can figure out how to lower them. "You tell us why something is so expensive, and we'll adjust our business for it," Preysman says. Sonny Lee, president of South Korea-based Nobland, which makes knitwear in Vietnam for Everlane, and one of the few executives who agreed to be identified, says most companies want to see production costs, but only Everlane shares them with customers. "We were happy to be transparent," she says. To save money, she's since invested in automatic cutting machines and transferred sample development from South Korea to Vietnam.

One of the two new contenders for Everlane's bag business is a factory in Shenzhen. The owners agreed to create samples for Everlane because Smith is good

The worker dorms in Shenzhen

friends with an executive at one of the factory's biggest customers. The factory is used to dealing with luxury handbag companies; several young women from a much larger American brand are also there.

Shenzhen is home to 10 million people. It's possible to drive two hours in any direction and still technically be in the city. We drive past security guards into a neat, green compound. A four-story, white-tile building sits back from the road, with a lawn in front, dormitories and a basketball court in the back.

The factory's founder started out almost five decades ago making handbags in his apartment in Hong Kong. A daughter of the founder and her nephew now run the facility. The employees are organized into teams and can make 90,000 bags a month. There's an industrial engineering department that's implementing the Japanese *kaizen* system of continuous learning. A poster on the wall lists the 20 principles: "Principle 13. Ask why 5 times to discover the root cause." "That's just like us," Preysman says. "We always ask why."

PHOTOGRAPH BY ADAM DEAN FOR BLOOMBERG BUSINESSWEEK

"They are very efficient," Bay says as we walk by a leather-cutting machine designed in Italy and run by one employee. Says Smith: "It's efficient and high-quality, and it's also going to be expensive."

In the dorms, the rooms are unadorned and compact, with space for four bunk beds and not much more; employees sleep on the bottom bunk and use the top for storage. Laundry hangs from the balconies. Preysman notices air conditioners. "When did you put those in?" he asks. Three years ago, the founder's daughter answers.

Preysman asks about the percentage of workers who return after the Lunar New Year holiday in February, an important indicator of how well the factory treats them. At this factory, it's risen to 85 percent. "I bet the air conditioning helped," he says.

After touring the premises, everyone sits around a conference table for the official presentations by the factory and Everlane. "On the West Coast, we have the idea that we can democratize everything," Preysman begins. "We want to keep our markup as low as possible. We didn't intend to be transparent about costs and factories, but we realized it was a real angle for us to tell the story."

"You really tell a lot of stories," says the female executive. She seems appreciative.

"We look for partners with the same aesthetics," Preysman says. "We've found that factories that perform worst on the audits have worse quality, too."

"You'll be impressed when you see our organic vegetable garden. You'll get organic vegetables for lunch," the executive offers. (Lunch is served not long after in a bright, airy room near the vegetable garden: figs with fresh Parmesan cheese, handmade pasta, and mushroom sauce.) "Having a vegetable garden sounds silly, but it does show your values," Preysman says. "Still, your workers aren't eating organic vegetables." A brief, awkward silence follows. Smith ends it. "We're not a big brand yet," she says. "We know there will be a lot of growing pains."

The other factory Preysman and his team visit is in the city of Suzhou, about 90 minutes west of Shanghai. It's owned by a company in Taiwan. Its customers are some of the biggest retailers in the world. "Usually I would say absolutely no," Smith says. "It's like whoa, too extreme. We're going to be a little blip on the map, and no one is going to care." But another former colleague suggested she consider the factory; it works quickly and cheaply and has the resources to help Everlane grow.

The general manager has flown in from Taipei and leads the Everlane team through a long hallway of showrooms. Luggage and backpacks made for almost every big American department store and mass brand are on display. He gives Preysman a quick once-over. "Hey, how much did those pants cost?" he asks. The pants, from Cadet, are black, loosefitting, and made of light wool. They cost $260. "That's too much," says the general manager. "But the material is $27 a yard," Preysman says. He asks the real costs of almost everything he buys. "They need a better fabric supplier," the manager says. On the factory floor, workers don't look up when the seven Everlane employees walk by. They're too busy. Preysman asks how many return after the Lunar New Year. About 97 percent. For lunch, the manager takes everyone to the top floor

Workers at the Shenzhen factory prepare material for pattern cutting

of the building. There's a lounge with couches and a pool table. He points to a wine storeroom. Preysman and Bay give their pitches as we sit around a table full of Chinese dishes and Pizza Hut pizza. The manager talks about shopping at the Barneys sale in San Francisco and doing yoga. "When your business with us reaches $1 million, I'll do the splits," he says.

The sample review begins after lunch. Bay asks about using different material and hardware that's less shiny. Also, could the factory make the bags without a lining? "The simplicity is a big challenge," the general manager says. He pulls Smith aside and tells her that Bay has expensive taste. He looks worried. "It doesn't have to be expensive," Bay says later. "It has to be clever. I wasn't adding anything. I was suggesting different ways of doing it."

A week after the trip to China, Preysman and Bay are in Everlane's New York studio. They've come to a decision on the bags: The factory in Suzhou is out. "It just didn't make sense," Preysman says. "There are certain vibes that you get, and the vibes there were a little odd." Bay adds: "We would never be able to have a conversation with one of the workers. And I think that's also one of the intangibles. It was too much of a traditional production line." She worried that would affect the quality, too. "The fewer hands that touch the product, the higher quality. The longer the lines, the less the worker is engaged."

There was also the issue of the factory's other customers. Everlane needs attention, and Preysman and Bay didn't think they could compete against the mass-market brands already there. Later, Smith says Everlane might again consider the factory if it expands into luggage.

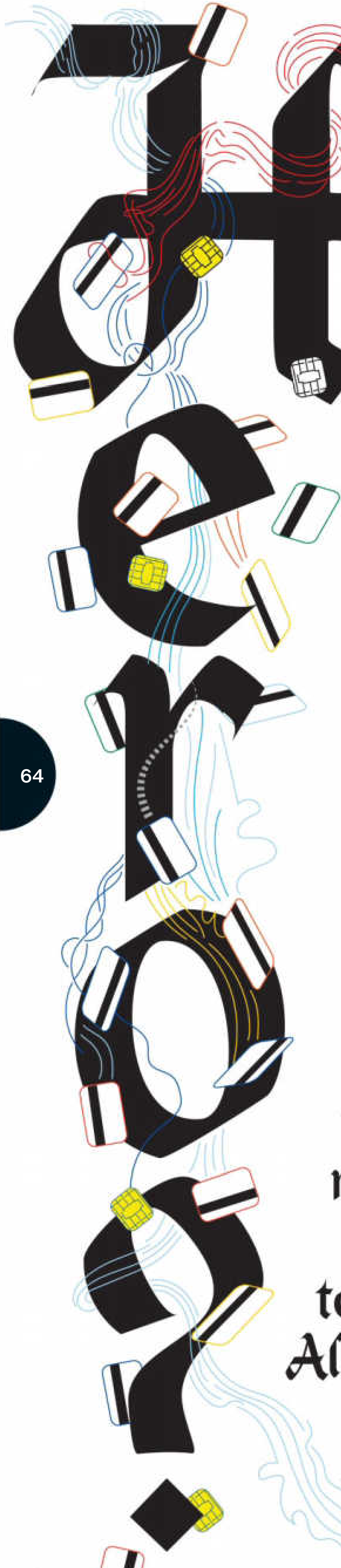
Everlane expects to place a test order for one of its new nylon backpacks with the Shenzhen factory in December. They'll be available in May.

Comparing prices isn't easy, Smith says, because the factories used different materials to make samples. But Everlane can compare one cost: labor. The Suzhou factory has the cheapest labor. It's 20 percent lower than the Dongguan factory, which is 10 percent to 20 percent lower than the Shenzhen factory. "The whole vetting process is to find good factories," she says. "If we pay more for labor to be in a better factory, we'll have to decide if that comes out of our margins. It won't affect our price."

Preysman gave the Dongguan factory one last chance to go through training provided by the auditor—which it did right after his visit—and to try to raise its score on the next inspection. "We have a level of loyalty, so working with the factory to improve is important. We can't just say, 'Hey, we don't like what you're doing. Peace. We're out.'"

If Everlane keeps growing, eventually it will face the question many companies do: Can its ambitions keep up with its size? Or, put another way: How big can a company get before it has to make compromises? Preysman worries about how fast to expand Everlane's offerings, when the company will have the resources to trace the materials it uses, and how to measure environmental sustainability. But he doesn't worry about Everlane losing its way. "The bigger you are, the more impact you can make." B

PHOTOGRAPH BY ADAM DEAN FOR BLOOMBERG BUSINESSWEEK



Hero?

By Karen Weise

Photographs by Nathanael Turner

CEO Dan Price has his reasons for raising base salaries to $70,000. Altruism may not be one of them

It seemed too good to be true. On April 13, with reporters from the *New York Times* and NBC News hovering nearby, Dan Price, the young chief executive officer of Gravity Payments, a Seattle-based credit card processing company, told his staff he was raising their minimum salary to $70,000 a year. Some employees would see their wages double. There was more: He planned to cut his own $1.1 million compensation to help cover the cost. The idea came to him, he'd later tell the media, after talking to a friend who earned less than he did. He'd read about a study showing that extra income improves the happiness of people who earn less than about $75,000. "It's not about making money; it's about making a difference," Price told the *Today Show*, one of two dozen TV interviews he did in the days following the announcement.

Price's story rocketed around the world, a capitalist fairy tale to counter growing inequality. With his tousled long hair and dark brown eyes, Price combined Brad Pitt's smolder and Boo Boo Bear's aw-shucks demeanor to become an articulate and attractive messenger. Rush Limbaugh denounced him as a socialist. Jesse Ventura christened him Robin Hood.

In late summer, the *New York Times* ran a longer piece on Price, now 31, showing that raising wages wasn't so simple. Job applicants had overwhelmed his company, and two employees quit, saying the increase wasn't fair to higher earners. "Potentially the worst blow of all," the *Times* wrote, was that about two weeks after the announcement, Price was sued by his older brother Lucas, who owns about 30 percent of Gravity, alleging Price paid himself too much in the first place. Price insinuated that his brother may have sued in reaction to the generous pay increase. "I know the decision to pay everyone a living wage is controversial," he told the *Seattle Times*, which first reported the lawsuit. "I deeply regret the rift this has caused in my relationship with my brother."

An expensive lawsuit, filed possibly in response to his kind act, made Price seem more of an underdog. When I met him at Gravity's headquarters in mid-October, he wasn't even supposed to be in Seattle. He'd been scheduled to join Planned Parenthood President Cecile Richards and General David Petraeus on a panel titled "Leading Under Pressure" at the Chicago Ideas Week festival. But Price had canceled at the last minute, saying he'd hit a wall of exhaustion. "I think I'm just standing in for a bunch of other people doing great stuff," he said. "To me the responsibility is to be the best spokesperson I can."

As we talked about his wild six months, I brought up the lawsuit, asking if Price thought Gravity's spending on the raises triggered his brother's suit, as he'd implied. "I have no idea," he slowly shrugged, looking right at me. "The quote in the *Seattle Times* from his attorney was, 'It wasn't only because of that.'" He twisted his beard between two fingers, contemplating the statement by Lucas's attorney, Greg Hollon. "That one singular quote in the paper is the only information I have about if they were connected or not."

It's a poignant story, one that I almost wrote. Until I realized Price knew more than he was letting on. The lawsuit couldn't have been prompted by the pay raise—if anything, it may have been the other way around. And his salary before the big announcement was unusually high. As I read through the court record and media reports, I began to see how Price was writing his own origin myth one interview at a time. With what he says is a $500,000 book deal, he's solidifying his place as the next do-gooder businessman, joining the CEOs of bigger companies, such


LIFE'S SWELL

as Zappos's Tony Hsieh and Whole Foods Market's John Mackey. In the process, he's surely become the only credit card processing executive to be feted by *Esquire*, courted by literary agents, and swooned at by women on social media who declared him "yum." But how it all happened is a little more complicated.

The day-to-day work at Gravity Payments is pretty unglamorous. Gravity is a middleman between merchants and payment networks, namely Visa and MasterCard, which in turn connect to banks that issue credit cards. If you use a credit card to pay for a Habanero Soft Chicken Burrito at a Taco Time in Seattle, it's Gravity that helps move $6.29 from your bank to the restaurant's, keeping a sliver for its service along the way.

As Price tells it, he started thinking about credit cards when his middle school band, Straightforword, was gigging around Idaho. He grew up in a religious family outside Boise, the fourth of six kids. The "teenage rock star," as his speaking-circuit agent now bills him, frequently performed at a local coffee shop and got to know the owner. Price says she complained about how much she had to pay for credit card processing and inadvertently taught him about swipe fees. "She let us do a show and gave us 100 percent of the door, but when someone wanted to pay their entrance with a credit card, we had to pay the fee," he says.

About that time, Price's father began consulting for the credit card industry. Price learned the ropes from his dad and helped businesses negotiate with processing vendors. In 2003, Price started college in Seattle, and he and Lucas founded Gravity the next year. The brothers initially split the company evenly. In 2005, at 21, Price married Kristie Lewellyn, and the next year he became Gravity's CEO.

Gravity works to keep merchants happy with low prices and good service. That's expensive, but acquiring new clients can be even more so. Gravity says it historically has lost only about 9 percent of its customers a year. "Typically, there's more than 30 percent attrition per year in our industry," Price says. Not quite: A 2012 study for Discover Financial Services found the rate averages 16 percent, and other sources indicate attrition rates well below 30 percent.

When the financial crisis hit in 2008, consumers cut their spending, and about 20 percent of Gravity's business disappeared within weeks, Price says. "It changed us from being mildly profitable to where we were losing money every month." He called a company meeting, and "I said, 'In seven months we will be out of business, so let's hold expenses and get into the black,' " he recalls. It worked. In 2012, Price began raising staff pay in steps. Each raise, he says, brought a surge in profit.

In February 2012, he and Lewellyn divorced, "amicably," the *New York Times* and *Inc.* wrote. Price's own pay grew rapidly. In 2011 he was making "probably $50,000 a year," he said at the Aspen Ideas Festival this summer. In 2012 his compensation jumped to $1 million, he says. That August, records show, he paid cash for a $900,000 house with a pool—a rarity in Seattle.

In 2013, Price says, Gravity hired compensation consultant Towers Watson to look at his salary. "The Towers Watson recommendation allowed for significant raises over the $1.1 million, but I elected to not raise my pay," he says. Hollon, Lucas's attorney, says Price is "mischaracterizing" the findings.

When Price made his $70,000 announcement, he told his staff, "My pay is set based on market rates and kinda what it would take to replace me. And because of this growing inequality, as a CEO that amount is really, really high. I make, uh, you know, a crazy, uh, my compensation is really, really high."

Whether judged by gross or net revenue, Price's pay was atypical for a company of Gravity's size. Its finances aren't public, but Price says gross revenue was $150 million in 2014 and will rise to an estimated $200 million in 2015. But Gravity doesn't get to keep the bulk of that revenue; it must automatically pass most of it on to credit card networks and issuers. The amount the company retains—net revenue, which Price calls "probably a more relevant figure"—was $16 million in 2014, he says. Gravity's 2014 profit was $2.2 million, Price adds.

At private companies with sales like Gravity's total revenue, salary and bonus for the top quartile of CEOs is $710,000, according to *Chief Executive* magazine's annual compensation survey. At companies with sales like Gravity's net revenue, the top quartile pay falls to about $373,000. At those with a similar number of employees as Gravity, the top quartile of CEOs makes $470,000 in salary and bonus. The CEO of JetPay, a publicly traded competitor that processes a similar volume as Gravity, received $355,000 in 2014.

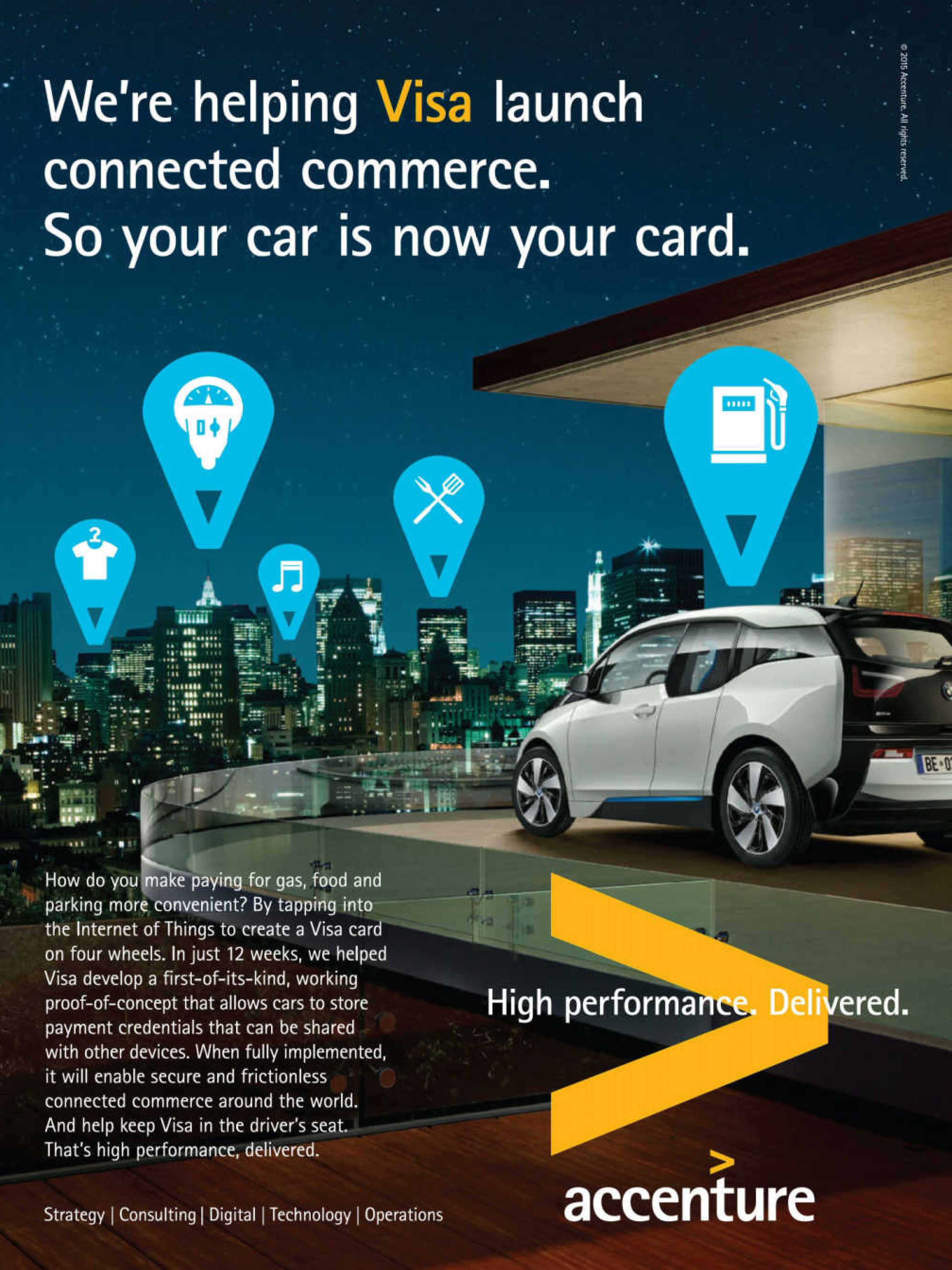
After meeting Price and researching the figures, I called to ask if he thought his $1.1 million pay was fair, given those benchmarks. He replied: "I appreciate you asking the question. I'm happy to answer any other questions you might have. I'm way over time, and there's a bunch of people waiting for me." When we spoke later, he said, "I have never given myself a raise without unanimous, full board approval.... That means we both voted the same way. Lucas Price and Daniel Price, the two board members." Hollon says that's "inaccurate" and that Price "paid himself excessive compensation for a number of years ... over Lucas's objections."

As he's recounted over and over, Price says his aha moment about pay came in late March, on a hike with his friend. "I realized that there were people I was working with—that I said I valued as partners, I said I really want to invest in—and they were making less than her," he told *The Daily Show*'s Trevor Noah.

Price says he thought back to a 2010 paper by Nobel prize winners Daniel Kahneman and Angus Deaton, who found that people's emotional well-being improves as their earnings rise, until their pay reaches about $75,000 a year. Price's hiking friend, Valerie Molina, remembers their exchange. "Dan said, 'I'm going to pay all my employees minimum $70,000,' " Molina said in an e-mail. " 'I'm not sure exactly how I'm going to do it, I need to run the numbers, but I am. Is that crazy?' "

Gravity had about 120 employees, and they earned a little less than $50,000 on average. He found it would →

"I have never given myself a raise without unanimous, full board approval"


We're helping Visa launch connected commerce. So your car is now your card.
How do you make paying for gas, food and parking more convenient? By tapping into the Internet of Things to create a Visa card on four wheels. In just 12 weeks, we helped Visa develop a first-of-its-kind, working proof-of-concept that allows cars to store payment credentials that can be shared with other devices. When fully implemented, it will enable secure and frictionless connected commerce around the world. And help keep Visa in the driver's seat. That's high performance, delivered.
High performance. Delivered.
accenture
Strategy | Consulting | Digital | Technology | Operations
© 2015 Accenture. All rights reserved.

Gravity staffers planking during a meeting

cost about $1.8 million to increase wages to $70,000 in steps over three years. Cutting his own pay would cover much of that, and if the wage hikes made his staff more productive, he figured, the whole move just might work.

Price had gotten publicity for a previous pay increase, telling the *Seattle Times* in 2013 that he was raising salaries 2 percent to make up for a federal hike in the employee payroll tax. Ryan Pirkle, who runs Gravity's communications, says with the bigger 2014 raise, Price told him, "I want the right people to tell the right story. I want exclusivity." That's why they invited the *New York Times* and NBC News to the announcement.

"I'm just doing the math, and I'm like, 'Wow,'" Price told me. He figured he could get as many as 700 new customers from the publicity. "That could pay for 10 percent of this crazy thing that I'm doing.... Of course, it became about something way bigger than that in hindsight, but at the time I was thinking so tactically."

By 3 a.m. the morning after the announcement, Price's phone was buzzing. The *Today Show* wanted him the next morning, as did *Good Morning America*. He hopped a plane to New York. "I did something like 25 live TV interviews in three days," he says. "We are really passionate about reforming credit card processing. This seemed like an opportunity—we could have a really big impact doing that."

Fox News pilloried him. Actor Russell Brand, in a laudatory YouTube video, joked, "It's difficult to ignore the fact that Dan Price looks a lot like Jesus." Price says he's been courted by TV producers including Ryan Seacrest and Mark Burnett, who created *Survivor* and *The Apprentice*. A spokesman for Seacrest says he "does not recall ever speaking with Mr. Price"; Burnett's press representatives didn't return requests for comment. Price signed with the talent agency William Morris Endeavor Entertainment and now charges as much as $20,000 per speech, Pirkle says. When I visited Gravity's office in October, Price told his team that the company was getting free booth space at *Inc.* magazine's annual conference, in addition to a speaking fee. "In terms of what they're paying us for a one-hour talk, we're looking at well over $100,000," he said. *Inc.* put him on its November cover. (According to the contract provided by *Inc.*, Price didn't receive a speaker's fee. Gravity did get exhibition space and an ad in the magazine for a combined value of $125,000.)

Price told me the hoopla has him feeling torn. "This might sound weird, because I do a lot of stuff, but I'm so sick of attention," he said. "It just feels like a lot of investment of yourself, you know?" He recalled when he was on the cover of *Entrepreneur* magazine last December and the relief he felt when the next issue went on sale. "I was so happy when they changed issues and I wasn't on the cover anymore," he said. "I'm in the airport a lot, and I was just so happy to not see myself." Yet for all the relief, Price and his team asked six times if he'd be on *Bloomberg Businessweek*'s cover.

Two weeks after returning from the April media blitzkrieg in New York, Price told me, he was settling in at home to finally unwind. "I was going to watch my first soccer game since this had all happened," he recalled. "My doorbell rang, and there was a legal courier. 'Are you Dan Price?' 'Yes.'" Price said he was served with Lucas's lawsuit. "I was shocked," he said. "The soccer game got turned off pretty quickly." It was during this recounting that Price told me how the comment from Lucas's lawyer in the *Seattle Times* was the "only information I have about if they were connected or not."

The possible retaliatory nature of the suit only adds to the drama of Price's wage hike. "This is all speculation on my part," Pirkle said in late September, before explaining how, as minority shareholder, Lucas gets paid dividends from Gravity's profits. "Those profits are obsolete when you raise the wages. His brother's, like, 'That's my money.'"

Pirkle suggested to me that the lawsuit could be part of a broader narrative about the purpose of business: "Is it to maximize shareholder returns? Or is it to best serve the customers and provide for employees?" *Inc.* hypothesized that Lucas filed the lawsuit after the pay increase "perhaps to pressure Dan to sell when Gravity was in the limelight, thus maximizing the value of Lucas's share."

But there's a problem with all those scenarios: The lawsuit predates the raise. Lucas did file the case two weeks after Price's announcement, but according to court records, Price was served with the suit at his house

YOU CAN'T BUILD THE BUSINESS OF TOMORROW ON THE NETWORK OF YESTERDAY.

It's no secret: business has changed—in every way, for every business. Modern technologies have brought new opportunities and new challenges, like BYOD and a mobile workforce, that old networks just weren't built for. While demand on these networks has increased exponentially, networking costs have skyrocketed and IT budgets haven't kept pace.

Comcast Business Enterprise Solutions is a new kind of network, built for a new kind of business. With $4.5 billion invested in our national IP backbone and a suite of managed solutions, Comcast Business is committed to designing, building, implementing and managing a communications network customized to the needs of today's large, widely distributed enterprise.

INTRODUCING COMCAST BUSINESS ENTERPRISE SOLUTIONS

COMCAST **BUSINESS** B4B BUILT FOR **BUSINESS**™

business.comcast.com/enterprise

“I’m so sick of attention. It just feels like a lot of investment of yourself”

on the afternoon of March 16—about two weeks before the fabled hike with his friend and almost a month before the wage increase announcement. Washington state allows litigants to serve a defendant before a suit is filed with the court. Hollon, Lucas’s attorney, says Price informed his brother of the pay hike with an e-mail on April 9, only four days before the *New York Times* and NBC descended on Seattle. (Pirkle said that in a later document, Lucas “specifically referenced” the wage hike as grounds for the case. Hollon responded that the May document added the pay increase as “one of the potential factual bases supporting the claims in the lawsuit” since “the wage program appeared to be a reaction by Dan to the lawsuit.”)

The lawsuit is light on details, but it claims that Price “improperly used his majority control of the company” to overpay himself, in the process reducing what Lucas was due. “Daniel’s actions have been burdensome, harsh and wrongful, and have shown a lack of fair dealing toward Lucas,” the suit alleges. It asks for unspecified damages and that Price buy out Lucas’s interest in Gravity. Hollon said the lawsuit was the culmination of “years” of efforts to resolve Lucas’s concerns. Price “on several occasions suggested to Lucas that if Lucas didn’t like Dan’s actions regarding Lucas’s rights as a shareholder, Lucas should seek legal remedies,” Hollon wrote in an e-mail. “Prior to the lawsuit, Dan had made clear that he would only engage with Lucas through Lucas’s counsel.”

If the lawsuit wasn’t a reaction to the wage hike, could it have been the other way around? After all, Price announced his magnanimous act a month after his brother sued him for, in essence, being greedy. Lowering his pay could give Price negotiating leverage, too. “With profits, at least in the short term, shifted to salaries, there is little left over to buy out his brother,” the *New York Times* reported Price said.

In a follow-up interview in mid-November, I pressed Price about the inconsistency. How could what he told me about being served two weeks after announcing the raise be true when the court records indicated otherwise?

“Umm, I’m not, I have to look,” he said.

The court document, I said, definitely says March 16.

“I am only aware of the suit being initiated after the raise,” he replied.

“The court record shows you being served on March 16 … at 1:25 p.m.,” I said. “And actually, your answer to it was dated April 3,” also before the pay hike.

“I am only aware of the suit being initiated after the raise,” he repeated.

I asked again how that could be, saying the declaration of service shows Price was served with the complaint, the summons, and other documents, “that you are a male, who is white, age 30, 5-feet-8-inches, medium height, dark hair.”

He paused for 20 seconds. “Are you there?” he asked, then twice repeated his statement that he was only aware of the suit being initiated in late April. “I’d be happy to answer any other questions you may have,” he added.

In ways big and small, the wage hike is touching Gravity’s operations daily. Some customers have left, though not many. The head count has grown by about 20. Tammi Kroll, a Yahoo! veteran, was so moved by Price’s message that she asked him to coffee, eventually taking an 80 percent pay cut to join Gravity to improve its technology systems. Matt Sakauye, Gravity’s president, had worked for the company in Hawaii since 2007 but recently moved to Seattle to handle the day-to-day operations while Price is on the road. When employees see TV cameras in the office, they know Price is back in town.

Price says his book about the wage experiment is under way. He’s signed with Tina Bennett, the literary agent who represents Malcolm Gladwell, and is working with Rick Kot, an executive editor at Penguin Random House’s Viking imprint who edited Andrew Ross Sorkin’s *Too Big to Fail*. Price told me in late October he’d already written 20,000 words. A week later, *Inc.* reported he’d written 40,000 words. About three weeks after that, Price told me he’d written 60,000 words—almost two-thirds of the book. That’s way faster than I can fathom writing, I responded. Price said he’s quick because he’s writing about himself: “You have to do research and fact-checking,” he said. “Mine’s totally raw.”

Price’s life may get more complicated the week of Dec. 7, when TEDx plans to post online a public talk by his former wife, who changed her last name to Colón. She spoke on Oct. 28 at the University of Kentucky about the power of writing to overcome trauma. Colón stood on stage wearing cerulean blue and, without naming Price, read from a journal entry she says she wrote in May 2006 about her then-husband. “He got mad at me for ignoring him and grabbed me and shook me again,” she read. “He also threw me to the ground and got on top of me. He started punching me in the stomach and slapped me across the face. I was shaking so bad.” Later in the talk, Colón recalled once locking herself in a car, “afraid he was going to body-slam me into the ground again or waterboard me in our upstairs bathroom like he had done before.”

I read those quotes to Price. “I’m just going to take a second because this is very surprising to me,” he said. He paused. “I appreciate and respect my former wife, and she played a very positive role in my life,” he said. “Out of respect for her, I wouldn’t feel comfortable responding to a supposed allegation she may have said coming from a *Bloomberg Businessweek* reporter when I have absolutely zero evidence of an allegation being made.” I told him that I wanted to be clear: I was giving him the chance to deny the claims. “My comment is very responsive,” he said. “I would be more than happy to provide a comment if and when I actually get the benefit of seeing what you are referencing.”

About three hours later, Price called back. “There’s one more thing that I would like to add to my previous statement,” he said. “The events that you described never happened.”

One aspect of Price’s saga is certain: Seventy employees at Gravity now earn far more than they did before. Was it altruism or a costly lawsuit that motivated it? If his book doesn’t provide answers, perhaps Lucas’s case, which goes to trial in May, will. B

Profiting From

Poor Africans

M-Kopa plans to be a $1 billion company by selling solar panels to rural residents—and providing them with credit

By Stephan Faris

Photographs by Sven Torfinn

Tom Opiyo is the best-performing salesperson at M-Kopa Solar, a Kenyan company selling solar power systems to the very poor. Watching him work, it's not hard to see why. Opiyo is a pastor who used to be a musician and concert promoter, and when he's closing a sale he never stops talking. "The electric company can sometimes leave you in the dark. With M-Kopa, the light cannot go out," he tells a group of 15 potential customers gathered under a tree in a rural area in western Kenya on a sunny October afternoon. "If you get power from the power company, you will always be paying. But when you buy M-Kopa, it's yours forever."

Opiyo is tall and thin, with a closely shaved head he keeps shaded under an M-Kopa baseball cap. He infuses his pitch with quotes from the Bible and brings in an actor to break the ice with impersonations of famous Kenyan politicians. But his underlying argument is financial. Before demonstrating his product, Opiyo walks the group through a calculation, asking how much each person spends a week on kerosene. He works out what that adds up to over the course of a year and then totals a sum for the entire group. "I show them the cost of what they are using compared to what I'm going to give them," Opiyo says. "If you bring this to their minds, they can see how they are foolish, and then you know they are going to buy."

M-Kopa estimates that 80 percent of its customers live on less than $2 a day. Three-quarters of them rely on small-scale farming as their primary or secondary source of income; the rest run small businesses. Energy accounts for a significant amount of their spending. The company's power system costs $200: It includes a solar panel, two LED bulbs, an LED flashlight, a rechargeable radio, and adaptors for charging a phone. The kit comes with a two-year warranty, and its battery is designed to last at least four years.

The company's core innovation has less to do with its physical product than the method it has developed to make it affordable. *Kopa* means "to borrow" in Swahili, and each system the company sells is in effect a loan of about $165. Clients pay $35 upfront and agree to make a daily payment of 45¢ for a year, after which the system is theirs. The kits come with a control box containing the battery and a SIM card that can communicate with M-Kopa headquarters in Nairobi. When a customer has made a payment via mobile phone, the SIM card sends a signal to activate the battery, which is powered by the panels. "If you boil it down, what we are is a finance company," says Nick Hughes, M-Kopa's strategy director and one of its founders. "What we've done is to give the customers some collateral and a line of credit."

Hughes, an Englishman, and his Canadian co-founder,

A food vendor in Kisumu cooking by solar-powered light

A Nairobi schoolgirl studying at night

Jesse Moore, first discussed working together in 2009. Hughes is a former executive at Vodafone, the British telecommunications company, and Moore was working for the GSMA Development Fund, a mobile telecommunications industry group, where he was in charge of identifying opportunities to make mobile services available to people in developing countries.

Hughes and Moore had three criteria for the company they wanted to build: It had to involve mobile technology, an area in which they both had experience; it had to solve what they called "a massive pain point" for the very poor; and they had to believe it would one day become a billion-dollar business. "The point is, if you're going to start something, make sure it can be huge," says Moore, now the company's managing director. The duo ran three pilot projects, including mobile phone savings and loan accounts in Kenya and a health-care hotline in India, before settling on solar power and founding M-Kopa in 2011.

The company says that, just as mobile phones reached areas landlines couldn't and electronic money introduced banking services into what had been a predominantly cash economy, M-Kopa's solar systems eventually can provide clean, renewable power to millions of customers for whom affordable electricity has remained out of reach. "We think it's possible to build a business with no trade-offs," Moore says. "We can benefit the environment. Our customers will be better off. And we'll get richer. We all can win."

In Kenya, having a telephone was once a privilege of the elite. In 2002 just 1 adult in 10 owned a mobile, according to the Pew Research Center. In 2007 the Kenyan mobile operator Safaricom launched a service called M-Pesa, allowing customers to use a phone to send cash. Originally intended as a way to help microfinance borrowers make and repay loans, M-Pesa was rapidly adopted for everything from salaries to taxi rides, bringing banking to people who were miles from physical bank branches. Today about a third of the Kenyan economy flits across Safaricom's airwaves, and 82 percent of Kenyan adults have a mobile phone. Signs of the mobile revolution are everywhere in Kisumu, the city in western Kenya from which Opiyo, the salesperson, operates. Roadside stands selling snacks and sodas flank tin-roofed kiosks offering SIM cards, airtime, or the possibility of loading cash onto a mobile account. Slogans hand-painted on concrete buildings hawk the power of the Internet in the service of selling smartphones: "Take Google With You" and "You Are Not on Facebook?"

M-Kopa's executives hope to accomplish a similar technological leapfrogging with their solar power kits. It was Hughes, when he was an executive at Vodafone—which owns 40 percent of Safaricom—who first came up with the idea that would become M-Pesa. M-Kopa's director of operations, Pauline Vaughan, was in charge of the mobile-money service during its early years. African economies, they say, have the potential to turn their underdevelopment into an advantage by adopting technologies that would have to displace entrenched incumbents in richer parts of the world. "One of the defining characteristics of leapfrogging is rapid uptake," Vaughan says. "In the best cases, leapfrogging has the potential to advance you, as well as help you catch up."

The technology M-Kopa wants to replace is ancient: kerosene. Many of the lamps used in Kenya would be recognizable to the Romans—small flames flickering in the wind, emitting an acrid smoke that burns the

"We know that it's important for them to keep their lights on at night, so they can be counted on to keep paying"

An M-Pesa agent in Kisumu helping a customer (top); Moore with Opiyo, right, and other staff in M-Kopa's Kisumu office

eyes, irritates the throat, and slowly turns walls and ceilings black. It's also expensive. According to a 2014 survey, an average off-grid household in Kenya spends about 75¢ a day on energy, or $272 a year—$164 on kerosene, $36 on charging their mobile phone, and $72 on batteries. M-Kopa estimates a customer saves about $750 over the first four years by switching to its basic solar kit.

The interest M-Kopa charges is high by U.S. or European standards. The cash price of one of its products is about 20 percent less than the installment price. But in the markets where the company's working—so far, Kenya, Tanzania, and Uganda—the rates are competitive. Traditional microfinance companies typically charge about 20 percent interest on their loans, and in October the Kenyan government issued treasury bills that offered investors a 23 percent annual return.

Once M-Kopa has a customer, it works hard to sell him more products on installment. "Your anchor product is clean energy, and then you build a finance relationship," Hughes says. A couple of weeks before the solar system is paid off, an M-Kopa representative calls to offer another product, in exchange for reopening the account and making payments for another few months. Ideally, these too will save the customer money over time: fuel-efficient stoves that spare charcoal, a bicycle that cuts transportation costs, a tank that stores rainwater. M-Kopa also sells Samsung smartphones and offers loans to pay for school fees. About a quarter of those who pay off their first purchase move on to others, the company says.

Felix Omondi Ogutu, 36, bought his solar kit in 2012 after hearing about it on the radio on a bus ride from a rural area into Kisumu, where he was studying information technology. After paying off his system, he extended his payment period in exchange for a smartphone. "This phone was like a dream to me," he says. "I longed to get an opportunity to get an Android OS. It would have been difficult for me to buy, but because it was in installments, I could pay bit by bit without feeling the economic heat."

Ogutu, who finished his exams in April, works at a charity that helps the elderly. He uses his smartphone to run a sort of mobile Internet cafe, helping local businesses fill out their taxes online and offering his neighbors a chance to read and write e-mail. He estimates that in an average month, he makes $40 from the service—more than the $15 he pays M-Kopa. "My work has been made very easy, because at the click of a button I have information," he says. "People gather around me. They want to see what's new."

Counterintuitively, the company has found that its poorest customers—those who rely on the system as their only source of electricity—make the best credit risks. "Our loan officer is that SIM card in the device that can shut it off remotely," says Chad Larson, M-Kopa's finance director and its third co-founder. "We know that it's important for them to keep their lights on at night, so they can be counted on to keep paying." The repayment rate is 93 percent for the solar power system and 98 percent for secondary products.

Since its commercial launch in October 2012, M-Kopa's Nairobi headquarters has been an active construction site, as builders race to keep up with its growth. Last year the company spilled over from the stone building that house its offices to the lot behind, where it erected two long barnlike buildings for its customer-care and engineering operations. Other departments work out of trailers on what used to be the front lawn, and in October carpenters were busy building a nursing area and a prayer room for the increasingly large and diverse staff. M-Kopa directly employs about 700 people in the three countries in which it operates, along with about 1,500 sales agents such as Opiyo working on commission. It's been adding about 50 workers a month.

Revenue has grown rapidly, from about $15 million in 2014 to an estimated $30 million this year, and the company says it will double in 2016. In September, M-Kopa announced it had sold a total of 250,000 systems; it aims to break the million-unit mark by the end of 2017. Every day about 600 new customers plug in their solar panels, meaning the company is extending loans of almost $100,000 a day to people who might otherwise not have access to credit. "We're really taking a bet on anyone who is willing to give us their phone number, their ID number, and a down payment," Moore says.

The company sees three paths for growth: broadening its customer base in East Africa, expanding into other countries, and selling more products to its existing clients. “There are all sorts of places with massive populations where it’s completely black at night,” Vaughan says. Next year, M-Kopa will introduce a kit that includes an extra battery and a small television. It also hopes to roll out a small refrigerator.

The management team is exploring the potential for collecting data from its devices. Employees at its call center can already pull up graphs showing how a customer’s battery is charging and discharging, allowing them to spot duds to either fix or swap. They can also look at the performance of the solar panels over time, detecting when a panel has been mounted on the wrong side of a roof or if it’s gathered dust and needs to be wiped clean.

M-Kopa’s current customer contract stipulates that the data the company amasses can be used only to improve customer experience, but the company has plans to collect listener and viewership data from its radios and televisions. “There’s data we can gather that practically no one else can,” Larson says. The company has received a grant from the reinsurer Swiss Re to explore the possibility of using its system to collect weather data from its devices. Solar panels can already tell the company when the sun is shining, and it’s experimenting with adding instruments that measure barometric pressure, humidity, temperature, and perhaps even rainfall.

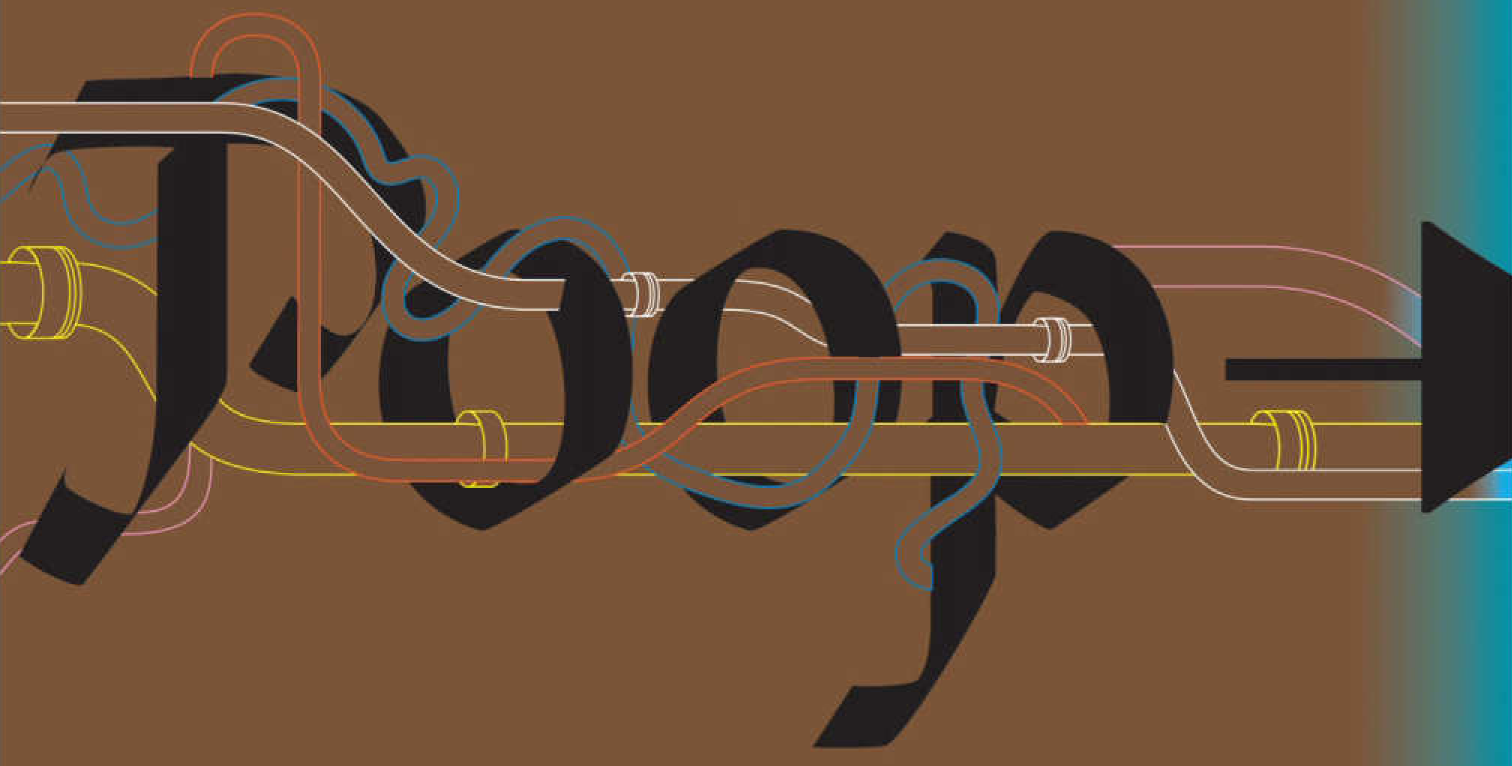
M-Kopa’s challenge will be to manage its rapid growth while maintaining its founders’ vision of building a business with no trade-offs. While the company takes care to explain the terms of its loans, it’s not always clear that its customers understand they are entering into a financial—rather than a traditional retail—relationship. And as M-Kopa grows larger, the temptation for competitors to hack or copy their devices will rise.

In November, M-Kopa received a clear vote of confidence when it completed a $19 million investment round, including $10 million from Generation Investment Management, a fund co-founded by former U.S. Vice President Al Gore that’s also invested in SolarCity, the biggest U.S. rooftop solar installer, and digital thermostat maker Nest Labs. “We think they have the potential of being a multibillion-dollar African success story,” says Colin le Duc, GIM’s head of research. Other investors in the round included Virgin’s Richard Branson and AOL co-founder Steve Case.

“If you take the long-term view and if you treat low-income people as customers, not charity cases, you can change the world,” Moore says. “Our customers’ lives are improved as our lives are improved.” B

A home outside Nairobi

By
Amanda Little



Water

Dow Chemical is
turning sewage into
a refreshing drink

“This is step one of the filtration process,” says Snehal Desai, struggling to suppress his gag reflex. “We call it the big-tooth comb.” There’s a torrent of raw sewage streaming through a channel below us at an Orange County Sanitation District facility that treats waste from the toilets, showers, and sinks of 1.5 million Californians. An enormous rake descends into the depths of the sludge and brings up a load of detritus—cardboard, wet wipes, tampons, marbles, toys, tennis balls, sneakers—that can’t fit through the screen covering the plant’s intake.

The flow that passes through has now begun its journey in an advanced purification process, and that’s what Desai and I have come to see. This plant is right next to the county’s water treatment facility, and together they perform a kind of alchemy, converting human sewage into purified water so clean it can go right back into residential faucets. The plants pump out 100 million gallons of drinking water daily, enough to supply 850,000 Orange County residents, which makes this the largest “toilet-to-tap” facility on the planet.

For decades, sewage has been treated and used for irrigating crops, parks, and golf courses, but making it fit for human consumption requires a much more rigorous filtration technology using polymer membranes. No thicker than a human hair, the membranes are at once delicate and durable. Using pores smaller than one-millionth of a millimeter, they’re capable of wiping out microscopic contaminants.

That’s Desai’s specialty—manufacturing membranes that cut the crap, literally, from sullied water. He’s come to see his products at work in the plant, which has become a global proving ground for toilet-to-tap technology. Desai is 52, but even with his salt-and-pepper hair he looks a decade younger, wearing jeans, a pastel plaid button-down, and thick-framed glasses. The global business director for the water division at Dow Chemical, he pulls in more than $1 billion in sales annually. The membrane market is growing more than 10 percent a year in part because of increasing water scarcity worldwide and ever more pressure to develop drought-proof water supplies from new sources.

“Recycled wastewater will probably be the single largest source of water for California over the next quarter century,” says Tim Quinn, executive director of the Association of California Water Agencies. “And it isn’t just happening here—the same goes for many water-strapped regions of the world.” San Diego recently announced plans to produce 33 percent of its water from recycled sewage by 2035, up from none today, and is designing a toilet-to-tap facility even bigger than Orange County’s. Governments in Australia, China, India, Israel, and Spain, and throughout the Middle East and sub-Saharan Africa have developed recycled wastewater systems for irrigation; many are beginning to convert their systems to make drinking water. Singapore has the largest program, producing a third of its potable water from sewage.

When you see and smell the noxious muck that courses into a sewage plant and consider everything it holds, it’s hard to believe the purification process is even possible. It’s harder still to accept that the end result can be delicious. “The purity you get from this process is quantifiably better than the water you get from traditional treatments—better even than some bottled water,” Desai says. “What flows from our membranes is essentially the Rolls-Royce of municipal water.”

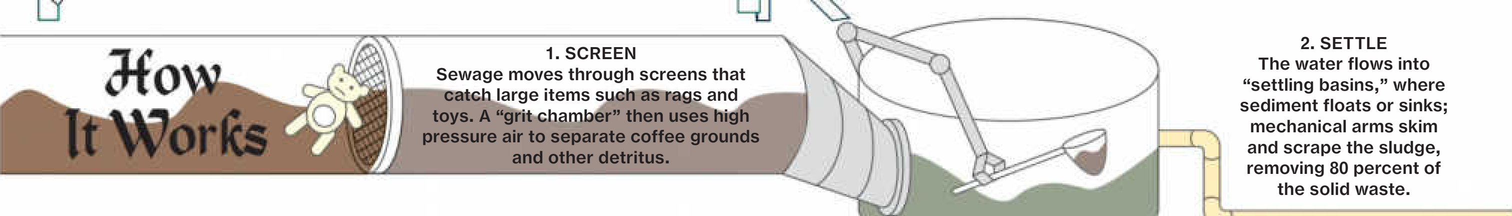
Dow Chemical is the company that gave the world napalm, Agent Orange, silicone breast implants, and plutonium triggers for hydrogen bombs. “If not Dow, then who?” Desai asks. The company has been a dominant player in advanced materials engineering for more than a century; it does business in 180 countries and has revenue of $57 billion a year. “The future water supply is a big-ass problem,” he says. “We’ve got growing urban populations, growing industries, and dwindling resources. Who can tackle something of this magnitude? You need patience and horsepower to come up with solutions and to scale them. You can’t do that without big-boy company money.”

Andrew Liveris, Dow’s chairman and chief executive officer, sees only opportunity. “Communities and companies are increasingly realizing the economic value of clean water—and that’s driving growth in Dow’s water business at two times [the rate of] the global GDP,” he says.

There’s one lingering hitch: the gross-out factor. Even given the desperation of drought, drinking your own waste is nobody’s first choice. “Accepting recycled wastewater is kind of like being asked to wear Hitler’s sweater,” says Paul Rozin, a social psychologist at the University of Pennsylvania who’s researched consumer response to toilet-to-tap programs. “No matter how many times you clean the sweater, you just can’t take the Hitler out of it.”

That’s certainly how I feel at the end of our tour of the Orange County sewage and water plants, when we arrive at a shining stainless-steel sink. What just hours earlier was raw sewage is flowing crystal clear from the tap. Desai fills two Dixie cups. “To the future!” he toasts. I shudder as I knock mine back. Somehow, there’s no trace of the Hitler. The stuff tastes every bit as good as water that bubbles up from a spring in the Alps. I pour myself a second cup.

The whole concept of recycled sewage might be harder to swallow if there weren’t already so much sewage in the water sources we routinely draw from. The Colorado River, for example, a primary source of drinking water for Southern California, receives billions of gallons a day of treated sewage: More than 200 plants in six states pump their effluent into the river. The Mississippi is also inundated. By the time water gets to New Orleans, it’s



Desai shows off Dow reverse osmosis elements

PHOTOGRAPH BY MATTHEW HINTZ FOR BLOOMBERG BUSINESSWEEK

been ingested and expelled by people in more than a half-dozen cities farther upriver.

"Very little of our water supply today is naturally pure," Desai says. In fact, the very reason chemists created these synthetic membranes decades ago is that, increasingly, humans have been contaminating the water supply. Industries have emerged, meanwhile, that need purer water for manufacturing. Most major players in the automotive, beer and wine, food processing, petrochemical, pharmaceutical, and semiconductor industries, for example, rely on water purified by membranes.

"Hyperpure water is how you get to precision electronics," Desai says. "When you're making a microchip—if you have even one little tiny particle of contaminant from the water used to clean the components, it could fail."

The membranes that do the hardest work—pulling out viruses, pathogens, and hormone-disrupting chemicals—perform "reverse osmosis," known in the industry as RO. They simulate the biological filtration process that happens within our cells as fluids flow across semipermeable membranes. Imagine that a hole in the RO membrane is the width of a basketball hoop. On that same scale, a water molecule would be the width of a basketball, but a pathogen or a virus would be the size of a Hummer—it can't pass through. Nor can pharmaceutical residues, which on this scale can be as large as a Mack truck.

The most difficult thing to remove is salt, because it isn't suspended in water, but dissolved. That's why recycling wastewater is about half the cost of desalinating ocean water: Both use RO membranes, but the salinity of ocean water is much higher, so it's harder and much more energy-intensive to pump it through the tiny holes. The RO membranes are rolled up inside 8-by-40-inch cylinders, thousands of which are stacked and networked together at the Orange County facility. Water is blasted through the modules with 1,000-horsepower pumps.

Before the water gets to the RO stage, it must go through seven other stages of filtration. In one, it enters a "microfiltration" process in which the water is sucked through thousands of tiny, porous straws. In another, it's zapped with a purifying ultraviolet light. "At each stage of filtration, you're using methods that remove contaminants with lower and lower molecular weight," Desai says. "Ultimately, by the time you get to reverse osmosis, nothing gets by but pure water."

Traditional forms of treating water are much cruder. Instead of forcing it through membranes, most plants in the U.S. today use chemicals. When water is pulled from the Colorado River, for instance, chemicals known as coagulants and flocculants are poured in, causing particles to bind together, separate from the liquid, and settle to the bottom of a holding tank. The water is then removed and disinfected with chlorine.

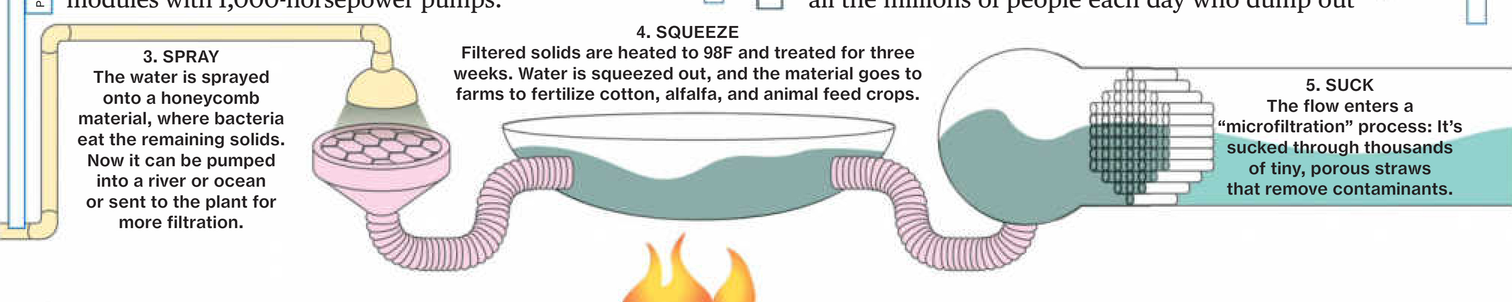
Another plus of the toilet-to-tap process: Sewage water doesn't have to be transported long distances. Almost none of the freshwater consumed by the 22 million people of Southern California is local, and the cost of importing it is climbing.

Even though it's local and cost-effective, toilet-to-tap has been hard to sell to the public. Proposals for major recycled wastewater plants in Tampa Bay, Los Angeles, and Brisbane, Australia, have failed in the past two decades—shut down by public objection to the yuck factor.

A key concern of critics is that wastewater could be more easily contaminated by a pathogen. Everybody in the water industry remembers the largest epidemic of waterborne disease in U.S. history: a 1993 outbreak caused by cryptosporidium, an invisible parasite that made its way into Milwaukee's public water supply. Almost half a million people were affected with uncontrollable diarrhea; 70 died from dehydration. The disinfectant chemicals used at the water treatment plant weren't strong enough to kill the parasite.

Because of this concern, the Orange County plant is required to have an "environmental buffer." After it gets through the RO process, the water that I drank at the end of my plant tour must flow into a local aquifer and mix with that natural supply before it's pumped into people's homes. And yet there's no health reason why processed water can't be consumed immediately. "No pathogen, including cryptosporidium, can make it past the physical barrier of an RO membrane," says Mike Markus, general manager of the Orange County Water District. "Nor can pharmaceutical chemicals or endocrine disrupters or virtually all other contaminants." He explains that as toilet-to-tap technology becomes more widely accepted, it will be cheaper and more efficient to pump directly into people's homes.

Desai is frowning into his grande black coffee at Starbucks. He'd asked the baristas to leave "room for milk," but they filled his cup nearly to the brim. "This is one of those inefficiencies that drives me crazy," he says. "Think of all the millions of people each day who dump out



a portion of their coffee to put milk in because it's filled too high—all the water and heat and fuel and coffee beans that are wasted because of this negligence! Why isn't there a line printed on every coffee cup that represents a universal standard for 'room for milk'?" He pauses, and his face brightens. "If you're interested in efficiency, everywhere you look there are opportunities."

Desai has the kind of mind that churns out ideas so fast you can almost hear it humming. The son of Indian immigrants, he grew up in Ann Arbor, Mich., where his father was a civil engineer for Bechtel. While a pre-med student at the University of Michigan, he decided he preferred chemistry to biology; he didn't like laboratories, but he loved business. "I was the guy who was the social chairman of my fraternity, and I worked my way through college as a bartender," he says. "I wasn't cut out for a lab coat."

He got a job at Dow after graduating, selling water treatment products to power and food processing plants. After a few years in the field, he received an MBA from Northwestern's Kellogg School of Management, where he took night classes. He spent more than a decade at Dow, then got the entrepreneurial itch and left to help build the startup Natureworks, a maker of corn-derived biodegradable plastics. He took annual sales from $10 million to $100 million and then returned to Dow to head the water division.

Dow's been making water filtration membranes since the 1970s—at first as a means for desalination. By the mid-'80s, it was selling water filtration products to Intel, General Motors, and other companies that wanted reliable streams of hyperpure water in their manufacturing facilities. Today, Dow is the biggest player in the RO membrane market, but it faces stiff competition from Toray Industries and Hydranautics. "They're like the Toyota, Ford, and GM of membranes," says Tom Pankratz, a water industry analyst, "but Dow is considered to be out front."

Desalination is still a huge part of Dow's water business. Its membranes were used at a $1.5 billion plant that opened this fall in Carlsbad, Calif., which provides almost 10 percent of San Diego's drinking water, siphoned from the Pacific Ocean. But given the cost advantages of toilet-to-tap, it has far more potential than desalination. Desai expects his sales will eventually tilt heavily toward toilet-to-tap. "When I look at my innovation portfolio now, pretty much everything in it has some connection to recycling wastewater," he says. "That's the megatrend."

The nerve center of the membrane industry is located in an unassuming metal warehouse in Edina, Minn., just outside the Twin Cities. "This is by far the most membrane made under one roof anywhere on the planet," Desai says. Tens of thousands of RO units are fabricated here every day. The membranes, which are thinner than tracing paper, are layered with mesh spacers that allow the water to flow through; they're then rolled into cylinders, wrapped in fiberglass, tested, and packaged.

The process is automated. Each RO cylinder is cut, glued, and rolled by robotic arms that look like praying mantises dancing. "The robotics in this facility allow us to scale and build products that don't fail," Desai says. "Failure in the purity of the water supply isn't an option. The membranes have to work. Precision is everything."

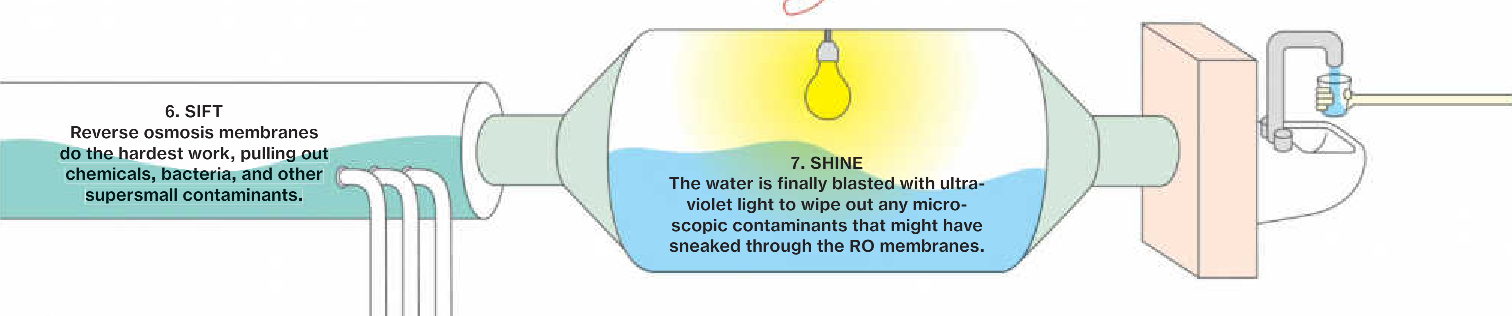
Desai is reluctant to disclose much detail about Dow's precision manufacturing; there's a blue line painted on the floor that I can't cross, and no pictures can be taken. He says Dow lost its patent on RO membranes in the 1990s—a blow to the company but a boon to the larger industry in the long term, driving competition, efficiency, cost reduction, and scale. In that same period, Dow has increased its products' efficiency. A decade ago, each RO cylinder could filter 4,800 gallons of water per day; now that same-size unit can filter 6,000 gallons.

"Ten years ago there was only one machine in this whole building—the rest was empty," says Max Fadeyev, a plant engineer. "Now it's jampacked with equipment running 24 hours a day, seven days a week. To us, it's seemed like an explosion." In December, Dow is opening a second large-scale water membrane manufacturing plant, in Saudi Arabia.

For now, Desai is focused on making membrane products for big industrial and municipal water systems, but he predicts the systems will eventually become smaller, serving communities and even individuals. Dow is also investing heavily in decentralized, at-home water recycling for developing-world markets. Bill Gates made a pitch for a similar approach in January 2015 when he blogged about watching a big pile of human feces on a conveyor belt enter a small-scale waste treatment plant built to serve a community. In minutes, the feces was converted into "water as good as any I've had out of a bottle," Gates wrote. "I would happily drink it every day." He's funding this "poop water" technology, as he calls it, developed by Janicki Bioenergy in Sedro-Woolley, Wash., for a pilot project in Dakar, Senegal; the self-powered plant treats and boils human waste, distilling the moisture into clean water.

Desai predicts that all water filtration technology may eventually be this accessible. "It's Moore's Law," he says. "What we're perfecting at a large scale, for big centralized plants, may become affordable and effective enough to use in a decentralized system, household by household, so that we each control and regenerate our own water supplies."

Importing water to places like Southern California and Texas has historically been cheap, but with climate change, extended droughts, and increasing stress on rivers and lakes, the economics of water are changing. Virtually every city in the world has to start rethinking the foundation of its water supply. "Not every city has an ocean, not everyone has good lakes and rivers," Desai says. "But everybody's got sewage." B

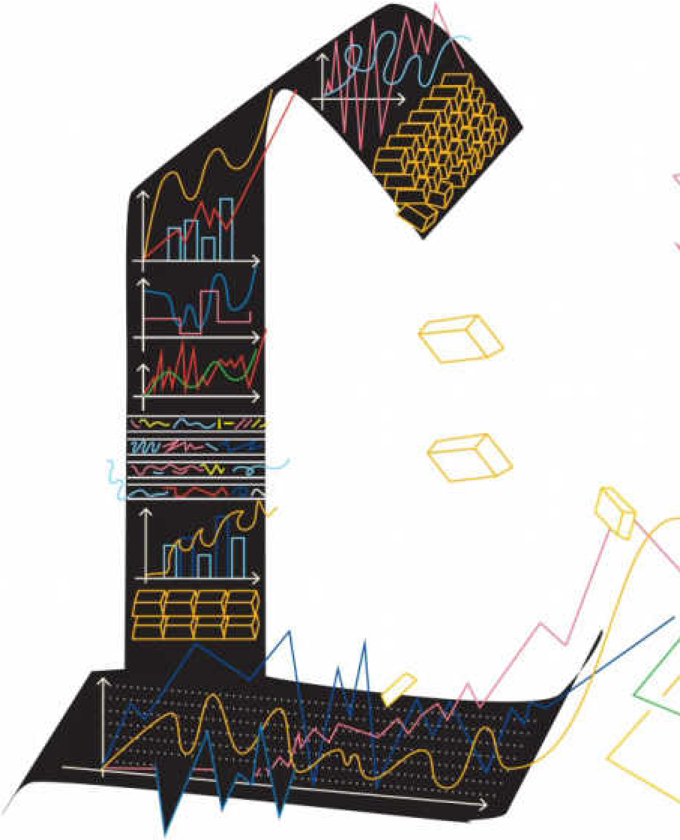


Putting the Good in Greed

BlackRock's Deborah Winshel says Wall Street has a role to play in solving the world's biggest problems

By Adam Satariano

Photograph by Samantha Casolari



Last April, two months after being named the first global head for impact investing at BlackRock, Deborah Winshel flew to San Francisco to meet with Ryan LaFond, a hedge fund manager at the firm. LaFond and a team of researchers had spent two years studying whether algorithms used to predict fluctuations in the stock market could also spot a company whose business is doing good. Identifying responsible corporate citizens was part of the reason Winshel left her job as president of the poverty-fighting Robin Hood Foundation; she believes Wall Street has a role to play in fixing some of the world's most urgent problems.

It's been about a decade since impact investing emerged as a strategy, but Wall Street investors have been skeptical, in part because it's been hard to measure its benefits. LaFond's team used quantitative data to select a few hundred publicly traded companies whose businesses, ranging from renewable energy to less-toxic pesticides, do good and to measure how much good they actually do. LaFond had more persuasive information to share with Winshel: When the companies' stocks were combined into an index, it outperformed the Russell 3000 benchmark.

"That was exactly the thing that made me think BlackRock could be a big player in this market," Winshel says. In mid-October, six months after her visit to San Francisco, BlackRock rolled out the Impact U.S. Equity Fund, one of several equity funds based on LaFond's work. They've since brought in more than $500 million from U.S. and European investors. "We're the hedge fund guys, and she's the do-gooder, and we're coming together to build something," LaFond says.

In less than a year, Winshel has become one of the world's most influential impact investors, helping set strategy for $7.5 billion of funds for BlackRock. In addition to LaFond's stock fund, the company has $6 billion invested in renewable energy and an additional $1 billion in companies working to address the effects of climate change. In a May survey of 146 investors, the Global Impact Investing Network, an industry trade group whose members include financial institutions large and small, said $10.6 billion was put toward impact investments last year, with an additional $12.2 billion projected for 2015.

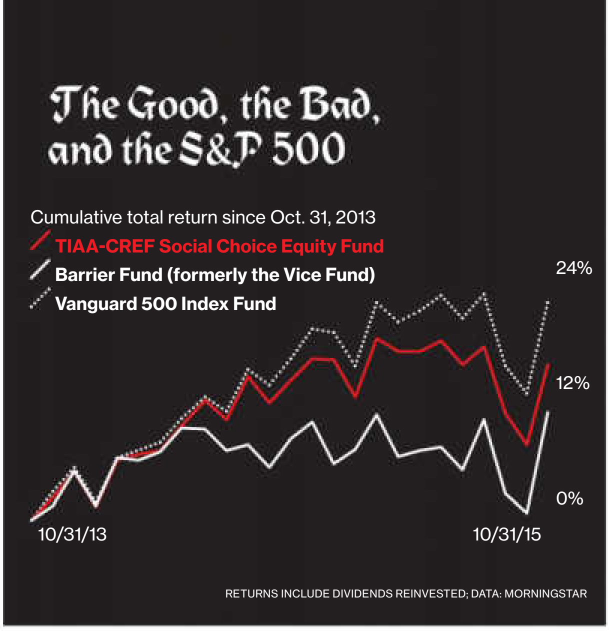
Winshel doesn't manage money. She's more of an evangelist trying to win over skeptics who question whether a Wall Street firm can effectively use its resources to benefit society. Some of the biggest threats the world faces—poverty, climate change, and disease—are too big for nonprofits, philanthropists, and governments to solve, Winshel says. "Having companies operate in a responsible way so they're creating an economic value and social value is a direction I think our world is moving towards," she says.

Established in 1988 by Chief Executive Officer Larry Fink, BlackRock manages about $4.5 trillion in assets, making it the world's largest investor, with huge stakes in Amazon.com, Wells Fargo, and other major companies. Its 5.7 percent stake in Apple is valued at more than $38 billion. BlackRock is also one of the biggest investors in corporate bonds, government debt, hedge funds, and commodities.

Before hiring Winshel, the company spent about two years weighing its strategies for impact investing. When people talk about impact investing, they're talking mostly about private investments in developing countries, such as sustainable-agriculture farms and microfinance lending. Many BlackRock executives initially didn't believe the firm should be involved. "It's pretty hard to say, 'Cheap stock and good for society,'" LaFond says. Demand from clients such as insurance companies, endowments, and family offices eventually won over the skeptics.

Winshel, who's 5 feet 4 with a slight build and a tidy brown bob parted to the side, has an easy demeanor. She's spent much of the past seven months traveling the world to meet with financial advisers and money managers who might someday steer money toward impact investing. "BlackRock has the opportunity to build out, in a much broader way, opportunities for investors to accomplish more than a financial return," she says. →

> "Let's not pretend that any investment in any one company is going to solve poverty or hunger"



Winshel spent four years at Robin Hood, where Fink is a board member. An influential charity, the organization was founded by billionaire hedge fund manager Paul Tudor Jones with the goal of eradicating poverty in New York. Winshel gave out more than $100 million a year in donations. Before that, she was the chief financial officer and chief operations officer for New York's Metropolitan Museum of Art. She spent more than a decade at JPMorgan Chase earlier in her career. The combination of Wall Street and nonprofit experience made her an ideal fit, says Rich Kushel, a BlackRock executive committee member who interviewed more than a dozen candidates. "You can't fake this one," he says. "You have to really be passionate."

Victoria Bjorklund, an attorney who worked with Winshel at the Met and Robin Hood, calls her "outcomes-oriented." Bjorklund recalls a snowshoeing trip in the Berkshires when a blizzard dropped more than 3 feet of snow overnight. Most people pulled out of the next morning's hike, but Winshel insisted on going. "She went first, and I was very happy to follow in her footsteps," Bjorklund says. Winshel relies less on gut instinct and more on metrics, says Mark Bezos, a marketing executive who worked with her at Robin Hood. After Hurricane Sandy in 2012, she created a heat map by overlaying poverty data with storm damage reports to pinpoint those people needing aid the most. "Her passion for helping others is real," he says. "Whatever she's doing at BlackRock, she has brought that with her."

BlackRock's success will depend on measuring the benefits of the impact investments. For so-called green bonds—debt offerings for solar-energy projects or public transportation initiatives, for example—BlackRock is requiring issuers to divulge where the funds will be spent and which carbon emissions will be reduced. LaFond and his team devised algorithms to comb through World Health Organization reports and identify the diseases inflicting the greatest harm around the world. The list was cross-referenced with U.S. Food and Drug Administration drug trial data to identify companies looking for cures. The software reads patent filings to spotlight companies developing environmental solutions such as renewable-energy technologies. The algorithms also search legal filings to identify questionable corporate practices and histories. "Unless you can measure, it's just theoretical," Kushel says.

BlackRock wants a business to both attempt to cure a devastating disease and trade at a premium. In its first six weeks on the market, the Impact U.S. Equity Fund rose 4.6 percent, slightly trailing the Standard & Poor's 500-stock index. The fund includes holdings in ExxonMobil and JPMorgan, companies other socially conscious investors wouldn't consider beneficial. Matthew Weatherley-White, an early impact investor who co-founded the Caprock Group in 2006, says he's disappointed but not surprised that such companies are in the mix. He describes BlackRock's approach as merely a marketing gimmick. Winshel and LaFond decline to comment about specific companies in the fund but say it uses metrics such as employee satisfaction and renewable-energy investments when making its selections.

BlackRock is "broadening the spectrum" of what can be defined as impact investing, Winshel says. "Clients are looking for a range of options. Everything we do has to be able to scale given the size of the investors we have."

Other firms on Wall Street are competing with BlackRock on the impact front. Goldman Sachs recently acquired Imprint Capital, which has focused on impact investing since 2007. Demand is expected to increase in the decades ahead, as more than $40 trillion in wealth moves from baby boomers to millennials, according to the Forum for Sustainable and Responsible Investment, a trade group. (Bloomberg LP, the owner of this magazine, is a member.) That capital will "have a direct impact in terms of ways companies and other institutions operate," says Andy Sieg, the head of global wealth management and retirement solutions at Merrill Lynch. "We're in the early innings."

Some impact-investment fund executives have cautious expectations. "Let's not pretend that any investment in any one company is going to solve poverty or hunger or all the vulnerabilities in people's lives," says Deval Patrick, the former governor of Massachusetts, who now leads private equity firm Bain Capital's impact-investing group. "The point is to show that there is a role here for private capital." Bain has invested in Toms Shoes, which uses proceeds from its sales to supply footwear to people in impoverished countries, and Sundial Brands, a maker of organic skin- and hair-care products.

Some early proponents say they worry that BlackRock is doing little more than repackaging existing products to take advantage of growing demand. "We should all hope they get it right," says Caprock's Weatherley-White. "But if BlackRock gets it wrong, that's going to be the largest pool of capital that's greenwashing and not getting impact right."

The tension is inevitable, says Andrew Kassoy, a co-founder of B Labs, an organization that certifies for-profit companies based on social and environmental performance, accountability, and transparency. "Most of the people who built impact investing came to the capital markets from the perspective of an activist, while the people who are coming to it now are coming from the perspective of a traditional investor," he says. "They are meeting in the middle, somewhat uncomfortably."

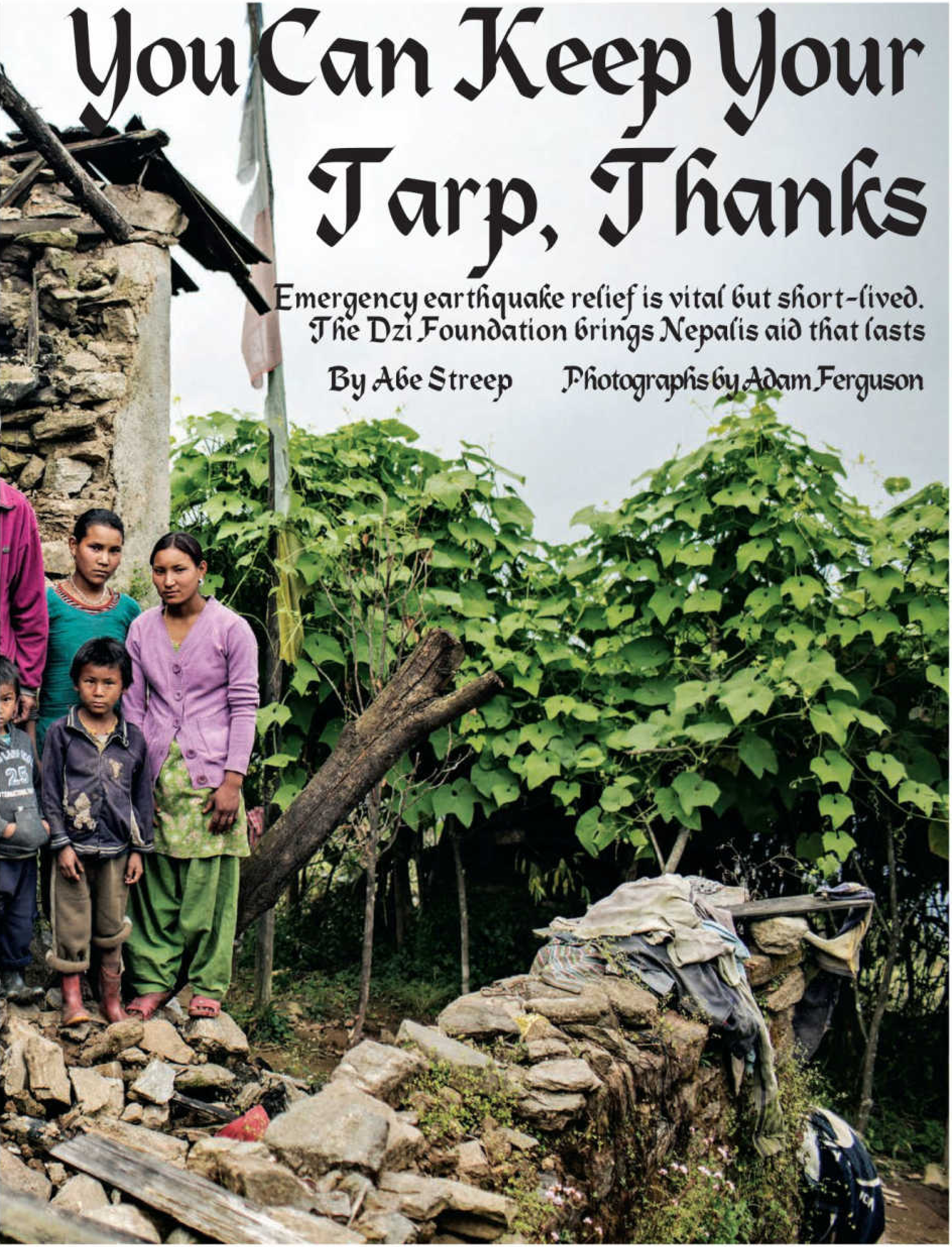
Winshel is careful not to overhype what her team at BlackRock can do. At this early stage, she says the worst thing would be to make promises that can't be met. "Our responsibility is to be as transparent and clear and straightforward about what everything we offer accomplishes—and what it doesn't," she says. If in the process she manages to get investors on board, "that will have a positive impact on the world." Ⓑ

A Sherpa family at their home in Bohane, which was damaged by aftershocks in May

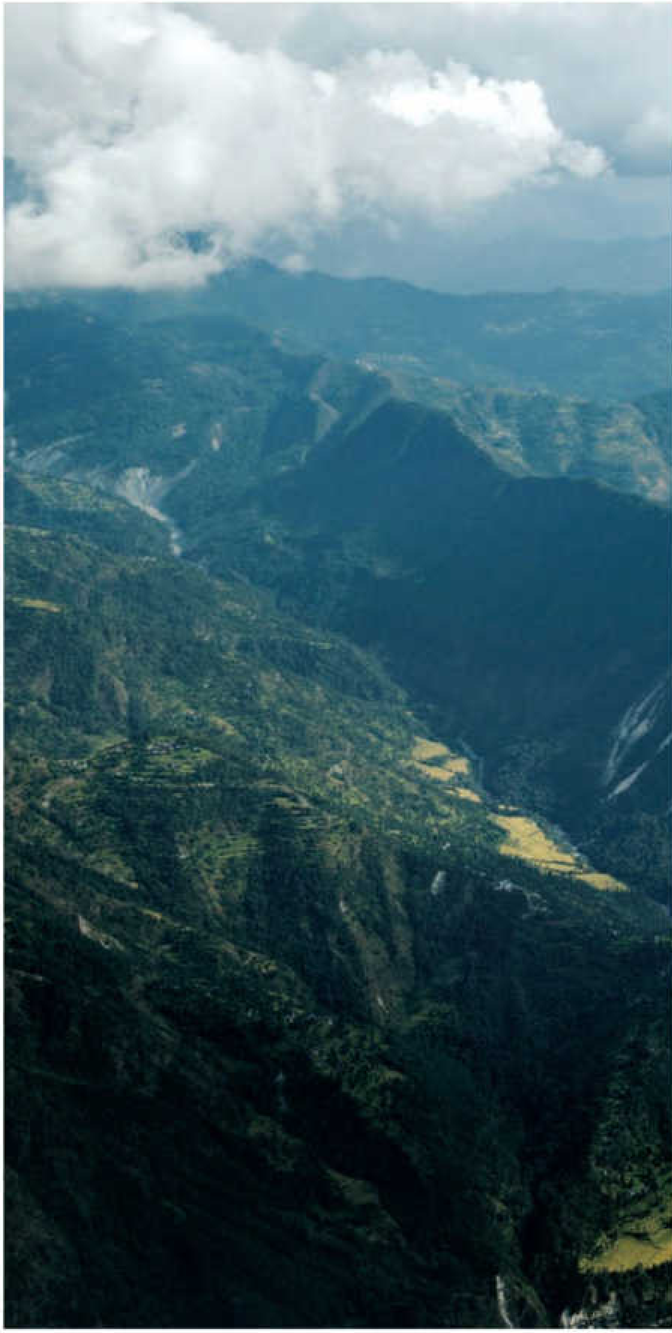
You Can Keep Your Tarp, Thanks

Emergency earthquake relief is vital but short-lived. The Dzi Foundation brings Nepalis aid that lasts

By Abe Streep   Photographs by Adam Ferguson



The road loses form in the night. That's probably a good thing. It's not much of a road at this point, more a gully full of boulders and hail drifts perched on a cliff. The truck, a 1980-something Tata, bottoms out regularly. Occasionally it fishtails toward the edge and a drop-off of a few hundred feet into the blackness of eastern Nepal's Khotang district. "Have you looked down?" asks Ben Ayers, the Nepal director of the Dzi Foundation, a nonprofit development group focused on rural communities. The passengers in the car, myself included, too busy bracing ourselves for the next spine-jarring impact, ignore the question.



We've been driving for 14 hours. Our guru—a term of respect for drivers in Nepal—is a 20-year-old kid named Jeevan, who recently took over the wheel from his 17-year-old brother, whom Ayers hired after a guy with an impressive rattail ripped us off. "My brother doesn't know how to drive," Jeevan says, his earrings glinting. "He doesn't even have a license!"

The truck hits a mud patch and slides toward the edge of the cliff. Jeevan slams the brakes and shifts into reverse. The truck hits the wall behind us. Our guru gets out and, after a cursory examination, announces that all is well—just a broken taillight. When he starts the engine back up, the transmission sounds like a helicopter, and some new kind of bad smell engulfs us. The truck, Jeevan says, is due for repair tomorrow.

It's Oct. 23, six months after a magnitude 7.8 earthquake and a 7.3 aftershock killed almost 9,000 Nepalis and left hundreds of thousands homeless. Relief arrived in a surge, with international aid organizations delivering bags of rice, pallets of bottled water, and emergency tarps. Now comes the harder, longer work of reconstruction in the rugged Himalayan foothills. I've joined Ayers, 38, a former logger from New Hampshire, to visit rebuilding projects in some of the remote villages where Dzi works. For the past eight years the organization has been striving to develop robust agricultural economies in 70 communities that have otherwise relied on subsistence farming, remittance labor in the Middle East, and portering for mountain climbers. It draws on financial backing from companies like Vitol, a Dutch oil services provider, and wealthy individuals such as Pete Ricketts, the governor of Nebraska and former chief operating officer of Ameritrade. Now these villages need relief—the quake destroyed 31 schools, and Dzi's surveys indicate that about half of the region's houses are uninhabitable.

But here's just the first of many challenges: All materials for the reconstruction, from cement to rebar, must travel over roads like the one we're on.

Our ultimate destination is Sotang, a market town in the impoverished Solukhumbu district, with stops in seven other remote villages. The plan for now is to start rebuilding some schools. The plan for the future is to develop the kind of prosperity that can make a community more resilient when it's confronted by natural disaster. "It's easy to drop off some tarps and call it good," Ayers says. "I think this is more effective."

Dzi's "model," as Ayers calls it, is toilets, not just tarps; irrigation projects, not bags of rice. He asks locals what they really need. It's a long-view approach based on the belief that small, slow, personal assistance is more useful than big, splashy, short-lived aid. But Ayers, a former climber with anti-establishment leanings, also enjoys throwing caution to the wind now and then. Immediately following the earthquake, when larger aid organizations struggled to ramp up operations, he and some friends in Kathmandu organized an unregistered, unlicensed relief effort called Yellow House. It was so effective, the Office of the United Nations High Commissioner on Refugees (UNHCR) started delivering emergency supplies via Yellow House trucks.

"The reason Nepal is poor—the reason that this road sucks—is because the state is ineffective," Ayers says. "So if you're going to be accountable to communities, sometimes you have no choice but to do things that are illegal."

At the moment, the government is making his

The Hongku River valley, looking toward the mountains of Solukhumbu

critique seem absurdly mild. On Sept. 20, Nepal adopted a constitution that divided the country into seven voting districts demarcated by geography. The Madhesi people, in the nation's south, objected, as the document minimized their representation. Violence broke out in the country's south and west, with at least 45 people killed, including nine police officers. One cop was burned alive. India's government, which is sympathetic to the Madhesis, ceased fuel deliveries on Sept. 23, presumably to pressure Nepal into amending the constitution. When India squeezes, Nepal has little recourse: Its only other neighbor, China, sits beyond the planet's highest mountains.

In Kathmandu, people wait in line for five days for gas; diesel sells for $19 a gallon on the black market. Food prices have doubled in rural areas. The Himalayan winter is looming, and the government has yet to spend any of the billions pledged by international governments. The UN and the U.S. Agency for International Development (USAID) are still delivering supplies, but their efforts have slowed as the government has rationed fuel. In a couple of weeks, at about the same time the government starts selling firewood to desperate citizens, the UN World Food Program will be forced to ground its two supply helicopters. Our ride may leave something to be desired, but at least we're moving. That's more than can be said for much of the country.

In the summer, many in Kathmandu hoped the earthquake would prove a dark gift. In June, Nepal assessed the cost of reconstruction at $6.7 billion. The international community quickly pledged $4.4 billion. The government established a body called the National Reconstruction Authority to disburse the funds. Nepalis who lost their homes were given $150 for temporary shelters and promised $2,000 more. There seemed reason to hope, too, that the disaster might spur the parliamentary government to finalize a new constitution; Nepal had been operating under a temporary one since a decadelong conflict with a Maoist insurgency ended in 2006.

But the phrase *Ke garne*—"What can I do?"—is ubiquitous for a reason, as is an accompanying shrug of futility. The constitution, drafted in August, was seen as little more than an effort to consolidate power in Nepal's three dominant political parties, and the new Parliament failed to give the Reconstruction Authority the legal mandate to distribute the promised relief money; it remains inactive.

When I later reach the authority's recently ousted chief executive officer, Govind Raj Pokharel, he says a government-led rebuilding effort won't begin for at least six months and that villagers will have to tough out the winter. He talks about the need for procedures and standardized earthquake-proof designs for all buildings, but he concedes no agency is prepared to provide this oversight. "It is a mess," he says.

The job of sorting out the mess fell to Prime Minister K.P. Oli, the 63-year-old leader of the United Marxist Leninists, who once spent more than a decade in prison for his involvement in a political party that advocated the beheading of landlords. (His predecessor, Sushil Koirala, did time for hijacking a plane.) Oli's first order of business was to lavish praise on the police. Shortly after he took office, the Parliament elected Bidhya Devi Bhandari, a member of Oli's party, as president. The election of a woman would have been seen as a sign of progress, were she not a veteran of Oli's party and widely rumored to be his girlfriend.

In the absence of a functioning government, the job of rebuilding has fallen to others. Nepal is home to a cottage

Nepali children play at Busuki Lower Secondary School in Tamua Village on Oct. 30. Dzi is retrofitting the school, which was damaged by aftershocks in May

"It's really f---ing hard to eliminate poverty. You can't reduce it to a sound bite, or that becomes a shtick"

industry of development and aid groups–125 international nongovernmental organizations in all. Most sprang into action, delivering supplies such as roofing tin. But there were a few missteps. Save the Children built temporary schools with tarp roofs that had a greenhouse effect, cooking the pupils beneath. In June the Nepali press skewered the World Food Program for allegedly delivering rotten rice in Gorkha, the epicenter of the quake. The UN vehemently denied the claim, but efforts at damage control only made things worse–a senior official parachuted in and suggested that Nepalis should be happy with whatever the WFP deigned to offer.

Most relief focused, understandably, on the epicenters of the two earthquakes. Neither Khotang nor Solukhumbu–the northern part of which is home to the relatively wealthy Mt. Everest region–is on the government's list of "severely affected areas." But the earthquake's effects were oddly uneven. Some villages in Khotang and Solukhumbu were spared, others devastated. "We'll have just enough to rebuild in our communities with what we've raised since the earthquake," Ayers says. "There's a need, and no one else is working there."

At the end of our drive with Jeevan, we walk 11 hours over steep terrain to Rakha, a town of 3,000 where Dzi has been working for years. We're accompanied by three porters from the town. Two of them, cousins Tek and Nara Dahal, are old friends of Ayers's. They occasionally give him grief for being unmarried or crack jokes about some of the donors he's brought on trips: "Ben, remember when that woman didn't poop for a week?" Nara asks.

A destroyed school at the top of a ridge announces the outskirts of town. A battered oxygen canister that once belonged to a climber hangs from a doorway–the bell. We scale another ridge, round a bend, and come to what must be the earth's most idyllic disaster zone. Rice and wheat grow thick on terraces, irrigated by diverted spring water. An earthquake-proof community building funded by Dzi stands in the center of town. Satellite dishes are powered by a micro-hydropower project. A farmers co-op serves as a bank, and residents plant lucrative cardamom, thanks to a Dzi program subsidizing seed purchases. Tek says he has 200 plants, which should provide a harvest of $1,500 this year. With that, plus the sale of other crops and portering work, he's doing pretty well–Nepal's average annual income is $730. We meet a woman whose house is rubble. She's staying with her brother. Seeing Ayers, she asks for money to rebuild. But Dzi doesn't rebuild houses–that would create dependency and jealousy. "We will help you earn money," he tells her. "We will not be able to help you build a house."

Most of the other homes look like Tek's: cracked and unsafe, but not ruined. Some have temporary structures out back draped with the UNHCR tarps that Dzi provided via Yellow House. Most have a fresh coat of paint. The government's payments of $150 for temporary shelters finally arrived in Rakha just the week before. This was months too late for any meaningful relief, but just in time for Dashain, an annual festival in which people sacrifice goats, ducks, water buffalo–anything that moves, really–and put layers of clay over their houses. Most people, Tek included, painted over the cracks, spent the government cash on meat and moonshine, and had a ripping Dashain.

"This," Ayers says, "is kind of what you want it to look like after an earthquake."

Ayers first traveled to Nepal while in college, becoming obsessed with the toughness of Solukhumbu's porters, who carry loads to base camps but are paid less than high-altitude Sherpa workers. One summer, Ayers enlisted as a porter, and when he returned to Bates College in Maine, he'd haul beer kegs with a tumpline, a sling that goes around the forehead. For a while he was an Earth First! anti-timber protester. Then, after getting to know some loggers and seeing their impressive trucks, he started cutting trees. After graduating, he split time between his logging operation in Maine and Nepal, where he started a tiny nonprofit called Porters' Progress that taught English.

He met Greg Mortenson one summer and struck up a casual mentor-mentee friendship, with Ayers seeking advice on fundraising. Mortenson, the executive director of the Central Asia Institute, was already a hero in the development sector for his work building schools for girls in Afghanistan and Pakistan–and this was before his 2006 best-selling memoir, *Three Cups of Tea*, turned him into a celebrity. His story proved too good to be true: A 2011 investigation by Jon Krakauer outed Mortenson for fictionalizing much of his memoir and misusing donor funds for, among other things, flights on private jets.

"Greg tapped into the great artery of American guilt," Ayers says. "He proved that, in development, you just have to make it sound good. The attention span of the public is: 'This will fix Nepal!' But the truth is it's really f---ing hard to eliminate poverty. You can't reduce it to a sound bite, or that becomes a shtick that becomes a shell game." Asked if Mortenson's fall made Dzi change any practices, he says, "It made us spend $20,000 a year on an audit."

In 2006, Ayers fired one of Porters' Progress's staff, who was drinking heavily. Ayers says the man threatened his life and started telling the Maoists that he was exploiting porters. Shortly thereafter, Porters' Progress's office was robbed and one of its staffers injured in a stabbing. Ayers retreated to Maine and got married. Then, in 2007, a climber named Jim Nowak approached him. Nowak had started a nonprofit–the Dzi Foundation. Named for a protective bead, the group's mission was, to put it gently, unfocused. It funded an orphanage in Kathmandu and gave away outdoor gear. But Nowak offered Ayers the chance to run a well-funded organization, rebuilding it largely from scratch. Ayers moved back to Nepal and was soon divorced. It wasn't long before

Above: Ayers speaks with Dzi staff and local NGO partners on Oct. 28 in Namlung village. Right: A villager makes the crossing between Bung and Cheskam villages; a landslide destroyed the footbridge.

he focused Dzi's efforts on Khotang and Solukhumbu.

The staff grew to 29, and Ayers and Nowak recruited donors such as Vitol, Goldman Sachs, the Switzerland-based Oak Foundation, and philanthropists including Ricketts and Kevin Connors, head of foreign exchange sales for Bank of America Merrill Lynch. From a certain standpoint, Nepal is overrun with NGOs headed by Westerners looking to absolve their guilt. But it's difficult to find critics of Dzi in Kathmandu's NGO circles. James Sharrock, a political consultant who's worked for the Carter Center and the UN, says, "Ben's been there longer than most of the expats, and he's very well-respected. Dzi is interesting because it's not top-down reconstruction. A lot of problems are going to be coming from imposing models on local communities. What they need is technical advice and support."

Ayers is sensitive to the Western savior myth. He says his goal is to work himself out of a job, eventually ceding his position to someone like Jhanak Karki, a 23-year-old Dzi staffer from Rakha who accompanies us on our trip. Still, he says, "tell it like it is. If Jhanak went to London to meet with Vitol, he wouldn't be as effective."

Ayers maintains that smaller is better and has no desire to compete with the likes of USAID or the WFP. "They come in with the solution in mind," he says. "They're not curious about what the people they're trying to help actually need. They're certainly not flexible. They have impacts, but they're expensive and cumbersome, and they tend to disempower the people they're trying to help by not having the courtesy to involve those people in the planning process. If a guy from Qatar showed up in a private jet in a poor town in Maine and said he was going to build schools, there would be issues."

But Dzi serves only 30,000 people. The WFP has provided food to more than 3 million in 12 districts since April. "Dzi is focused on the right stuff, the right areas," says Richard Ragan, who served as the WFP's emergency relief co-ordinator for Nepal until July. But, he adds, "it's much easier for Ben and Dzi to be nimble. It's smaller money, and they don't have the energy to deal with the national government."

"What makes us different," Ayers says, "is that we've tried to create a system where we're accountable. You have to stop treating the poor as the poor and more like your clients."

That, and a tolerance for risk.

Dzi starts construction on its first post-earthquake school on Oct. 29. We're in the village of Namlung, a community of about 1,000 Kulung Rai people in Solukhumbu. Nepal has more than 100 ethnicities and castes, and as many languages. The Kulung Rai consult shamans, worship forests and rivers, and speak a language that exists nowhere else on earth.

We meet Dzi's engineer, a 44-year-old named Raj Kumar Rai, by a volleyball court. Kumar Rai is responsible for overseeing the construction of 31 earthquake-proof schools. The building site for the first has been the subject of much debate. Villagers originally wanted to keep their court, and only the day before did Kumar Rai convince everyone that the flat, stable ground should host the school. The court is marked off with white string—the outlines for the foundation. At 9 a.m., someone erects a *puja*, or blessing, made of a piece of bamboo and flowers, which will stay up until the building is complete. The plan is to construct the walls of stone and mud, with concrete floors and ring beams for support. In a prebuilding session, Kumar Rai pleads with the villagers to properly cure their cement, so the concrete doesn't crack. "If you don't cure your cement," he says, "it's like having a baby and leaving it on a rock!" But that's a problem for another day. At the moment, Namlung has no cement; it likely won't arrive until the fuel crisis abates.

Also, good help is hard to track down. "I've been able to find only two skilled masons we can hire," Kumar Rai tells me. The rest of the young, able-bodied people are in the Persian Gulf. Next to agriculture, remittance is Nepal's biggest economic engine, accounting for about $5.6 billion in annual income, according to the World Bank. The country's gross domestic product is only $19.6 billion. One effect of the remittance culture is to inhibit democracy—the approximately 2 million Nepalis abroad cannot vote. Another effect is more grim still: Many Nepalis are working on the FIFA World Cup stadiums in Qatar. Last year, 157 died on the job, according to reporting by the *Guardian*. Nonetheless, Tek maintains that going abroad is safer and more prestigious than working as a porter for Everest climbers.

Soon after erecting the puja, volunteers start swinging pickaxes and working shovels, digging the foundation. This is an achievement in and of itself: Most nonprofits have struggled to build schools, because the government has yet to approve an earthquake-proof design. Dzi simply submitted its architectural plans to the district co-ordinator (the equivalent of a mayor) and asked him to sign off on a memorandum of understanding.

"The government can't get its s--- together to approve them," Ayers says, "and we can't wait any longer. So we're just going to go ahead and get a letter to cover our asses."

Dzi is focused on schools first, then plans to train masons to rebuild homes. When I press Ayers on why that hasn't started already, he says, "We're a little behind the ball. But we only have so much money." Besides, he points out, who in Rakha has the cash to pay a mason? The government's promised $2,000 isn't arriving anytime soon. "Those people in Rakha threw on some paint because they don't have another choice," he says. "That's what poverty is. We have to help them make more money so someday they can build back better."

Still, the long view can be difficult for some to swallow. Later in our trip, we come across a tiny village called

"We will help you earn money. We will not be able to help you build a house"

Komlu that received all of the earthquake's wrath. Not a house is standing, and 80 people are living in what amounts to a refugee camp of temporary metal structures. Flies buzz around open sores on the legs of a young boy. A woman offers us oranges and asks for blankets for the winter. The nearest water is a 40-minute hike. Everyone looks at Ayers expectantly.

He says he can't offer blankets or new houses and instead discusses long-term prosperity. One by one, the people drift away.

We walk through Shitsville—the Village Development Committee of Gudel. (Nepal's rural areas are divvied into VDCs, the equivalent of counties.) Gudel is a Kulung Rai word, but in Nepali it translates, literally, as "Poop Town." When Dzi arrived here in 2008, the villages used "pig toilets"—outhouses perched atop pens full of fecal matter-eating hogs. Rates of diarrhea, caused by coliform in the water, were high. Ayers successfully pitched Vitol on a $126,000 toilet project. In the past seven years, Gudel has seen a 25 percent decrease in diarrheal illness. Now the county is also free of plastic trash—the community recently enacted a ban on littering, a rarity in rural Nepal.

The second of two villages we visit in Gudel, Chachalung, is a Rai village of 180 households, or roughly 1,000 people. It was spared by the earthquake—no houses were damaged. A micro-hydropower project provides electricity. There's hardly any remittance labor—maybe 20 people in the whole village. The school doesn't need repairing. There's not even a fuel crisis. All cooking is done with wood fires, and the community doesn't need rebuilding supplies to be brought in.

But Chachalung faces a fearsome challenge. Above the town sits the beginning of a landslide that's about 200 meters (656 feet) wide and growing. It's on track to take out the entire village, creeping lower each monsoon season. That it didn't obliterate Chachalung during the earthquake was a miracle. Every year the villagers send a young person up to it to offer a puja; last year they also paid some Buddhist lamas $100 to bless the slide.

We go into a community building, where Ayers asks about the pujas. Someone says they have to be performed by a virgin drinking salt water. Then a guy in a green puffy jacket interjects to clarify that pujas aren't the town's preferred strategy. "We want to move," he says. "But the government hasn't done anything for us. We can't sit on someone else's land." So pujas it is.

A man with a fixed smile says, "Our shaman has seen the future, and Chachalung is swept away."

The guy in the green puffy cuts in, saying, "It's not hard to tell. Just look at the ground."

Then the man with the smile says to Ayers, "You have helped us from mouth to digestion!" People laugh. Life is pretty good here, at least until the ground shakes again. B

"I helped to start CECP with the belief that corporations could be a force for good in society."

PAUL NEWMAN (1925–2008), FOUNDING CO-CHAIR, CECP

CECP is pleased to welcome 26 new CEOs in the past year:

Jeffrey J. Brown
Ally Financial

Peter Hancock
American International Group, Inc.

Gary E. Dickerson
Applied Materials, Inc.

Randall L. Stephenson
AT&T Inc.

Vincent A. Forlenza
BD

Victor Luis
Coach, Inc.

Leo P. Denault
Entergy Corporation

Thomas J. DeRosa
Health Care REIT, Inc.

Patrick Burke
HSBC USA

Vishal Sikka
Infosys Limited

Renée James
Intel Corporation

Steve Easterbrook
McDonald's Corporation

James J. Murren
MGM Resorts International

Thomas Farley
NYSE

David I. McKay
Royal Bank of Canada

Eric Spiegel
Siemens Corporation

Brian C. Cornell
Target

Surya Kant
Tata Consultancy Services

Ronald M. DeFeo
TEREX Corporation

Christopher Swift
The Hartford

Rick Kash
The Nielsen Company

William S. Demchak
The PNC Financial Services Group, Inc.

James Lentz
Toyota Motor North America, Inc.

Gregory Hayes
United Technologies Corporation

David Abney
UPS

Philippe P. Dauman
Viacom Inc.

CECP is pleased to welcome 10 new corporations in the past year at the company level:

Autodesk, Inc.
Darden Restaurants, Inc.
DaVita Healthcare Partners, Inc.
Genentech
John Deere
Massachusetts Mutual Life Insurance Company
The Chubb Corporation
USAA
WestRock Company
Yum! Brands, Inc.

Pictured top to bottom: Christopher Swift, The Hartford; Randall L. Stephenson, AT&T; Vishal Sikka, Infosys Limited; David Abney, UPS

Find the full list of CECP CEOs at cecp.co/CEOs.

Leading CEOs are united in the belief that societal improvement is an essential measure of business performance. These CEOs belong to CECP, a coalition of 150 CEOs that commits **$16.6 billion** annually through their companies to solving pressing societal challenges, understanding that close community ties are a direct line to **employee engagement, innovation, customers, new markets, brand,** and **sustainability,** as well as **mitigating risk** and **building trust**.

CEOs: Join us
11th Annual Board of Boards
February 29, 2016
New York, NY
cecp.co/BoB

CECP
THE CEO FORCE FOR GOOD
cecp.co

COLD-BREWED HOT CHOCOLATE / NEW POSITIONS FOR EX-NFL PROS / OFFICE FURNITURE GOES SOFT

ETC

STARTUP VS. WILD

CAN YOU IMPROVE CUBICLE CULTURE BY TAKING THINGS OUTSIDE?

BY REBECCA GREENFIELD

PHOTOGRAPHS BY MATHEW SCOTT

Twenty startup employees are stuck in the mountains in Northern California with one goal: not dying.

The first order of business is building a proper shelter. Dan Baird, the head instructor at California Survival School, divides the employees into teams to gather branches and leaves to construct rickety lean-tos. They're from RealScout—a Silicon Valley startup where their days are spent developing an app that lets you search for homes by parameters such as luxury bathrooms and proximity to Google bus stops. "Insulation, insulation, insulation," says Baird, who looks like he was born wearing a pair of hiking pants. "You're not going to be in here telling ghost stories or playing cards."

On this sunny Friday morning, RealScout's coders, marketing executives, and product team have departed from traditional office duties to learn basic survival skills—all under the guise of team building. In addition to constructing makeshift shelters, RealScout's staff will learn how to purify water, identify wild edibles, and for the main event, start a fire from scratch. "I've never done anything like survival camp before," says Bryan Kay, a member engagement specialist at RealScout, his tapered sweatpants betraying a penchant for fashion over function.

As businesses continue to search for corporate-culture enhancers they hope will give them a competitive advantage, many companies are making their employees play Bear Grylls for the day, believing it may promote bonding and teach teamwork skills that can be used at the office. Culture, of course, isn't something companies can manufacture. But that hasn't stopped them and their chief happiness officers from investing in culture-building off-sites and fads. Over the last few years, Baird says he's seen an "explosion" of tech companies sending groups to him for survival skills training, including Facebook, Google, and Twitter. (Neither Facebook nor Google would confirm their participation.) Interest has doubled each year for the past three years, he says, from an average of about one trip a month to more than one a week.

"Survival—what we're doing today—is literally what we do every day," says Andrew Flachner, the 27-year-old co-founder and chief executive officer of RealScout. It costs him from $7,000 to $10,000 to put business on hiatus for the day, on top of the $2,000 cost of the program. Flachner is betting the excursion will result in some tangible benefits. "It's team building, but it's also reward," he says. He cites "retention" and getting people to "enjoy staying longer at the office" as positive returns on his investment.

Tech companies in particular crave these rugged, disconnected experiences, Baird says. "There's a real thirst for that—a rewilding experience for the overcivilized and technologically inundated." In a hyperconnected world, all a CEO has to do to reboot his employees is put them in the woods. (Although the woods where Baird hosts his retreats have great cell service.)

Corporate team building traces back to human resources pioneer Elton Mayo. His experiments at Western Electric's Hawthorne plant in Illinois in the early 20th century initially focused on ideal light levels to increase worker productivity. Turns out relationships—not light levels—motivated workers. "The desire to stand well with one's fellows, the so-called human instinct of association, easily outweighs the merely individual interest and the logic of reasoning upon which so many spurious principles of management are based," he wrote.

Before workers ventured into the great outdoors, most motivational exercises took place in the same offices where employees worked. Groups talked about their goals, interpersonal relationships, or role clarification.

Sessions went from break rooms to the wilderness in the 1980s. At that time, Outward Bound's rugged wilderness experiences, which first came to the U.S. in the 1960s, became a fixture of corporate life. The popularity of the programs created a mini-outdoor-team-building boom, leading some organizers to offer less Spartan experiences. People hiked out into nature, did hokey activities that had nothing to do with their jobs—remember trust falls and rope courses?—and came

Anna Marie Morales, account executive

Sarah Lin, user experience designer

Michael Parikh, co-founder/CTO

Nic Cavigliano, software engineer

Duke Fan, head of product

Puja Parikh, business operations analyst

back more united. Or, at least, that's how the thinking went.

That idea turned out to be wrong. Multiple metareviews of decades' worth of team-building research have found no conclusive evidence that it improves worker performance. "A lot of companies believe there is some magic that translates into some behaviors, and therefore you get results," says Eduardo Salas, an organizational psychologist who's studied the field for 30 years. "Team building doesn't guide behavior; it's just an experience."

Trust falls have fallen out of favor with employees, who find them "super cliché," Flachner says, but team building is alive and well, from whitewater rafting to entire companies participating in Tough Mudder, the military-style obstacle course.

The California Survival School says it will "take your team's soft skills and leadership practices to the next level through wildly engaging outdoor survival challenges." There's also the added allure of symbolism. "Making fire is the closest thing you can do as a human to making something with nothing," says Thomas Coyne, who runs the Survival Training School of California (not to be confused with the California Survival School), which also organizes corporate wilderness experiences.

Despite activities that seem to ring true (mastering the natural world has long been seen as a key to mastering the modern world), research has found the activities that improve performance are the ones that more closely mimic the actual work being done. "It has to follow the business model," says Jocelyn Kung, founder and CEO of the Kung Group, which has worked with Fortune 500 companies to improve teamwork. "The group needs to have a purpose for doing it and a problem to solve that's related to whatever the mission is." Researchers refer to those more robust methods as team training, not team building. Those activities tend to happen in a conference room, not at a campsite.

THERE'S A REAL THIRST FOR THAT— A REWILDING EXPERIENCE FOR THE OVERCIVILIZED

Still, managers often say you have to escape from the office to improve performance in it. John Ploumitsakos, a senior director of product strategy and sales at Twitter, took his team to the California Survival School last year. "While wilderness survival isn't something we tackle every day at the office, it teaches us how to tackle new obstacles and operate as a team to solve a problem effectively," he says.

That's how RealScout staffers ended up in the mountains, working their hands bloody in an attempt to make fire out of sticks. "I hope everyone can separate from the anxiety, the urgency, the excitement of a startup and kind of just release," Flachner says.

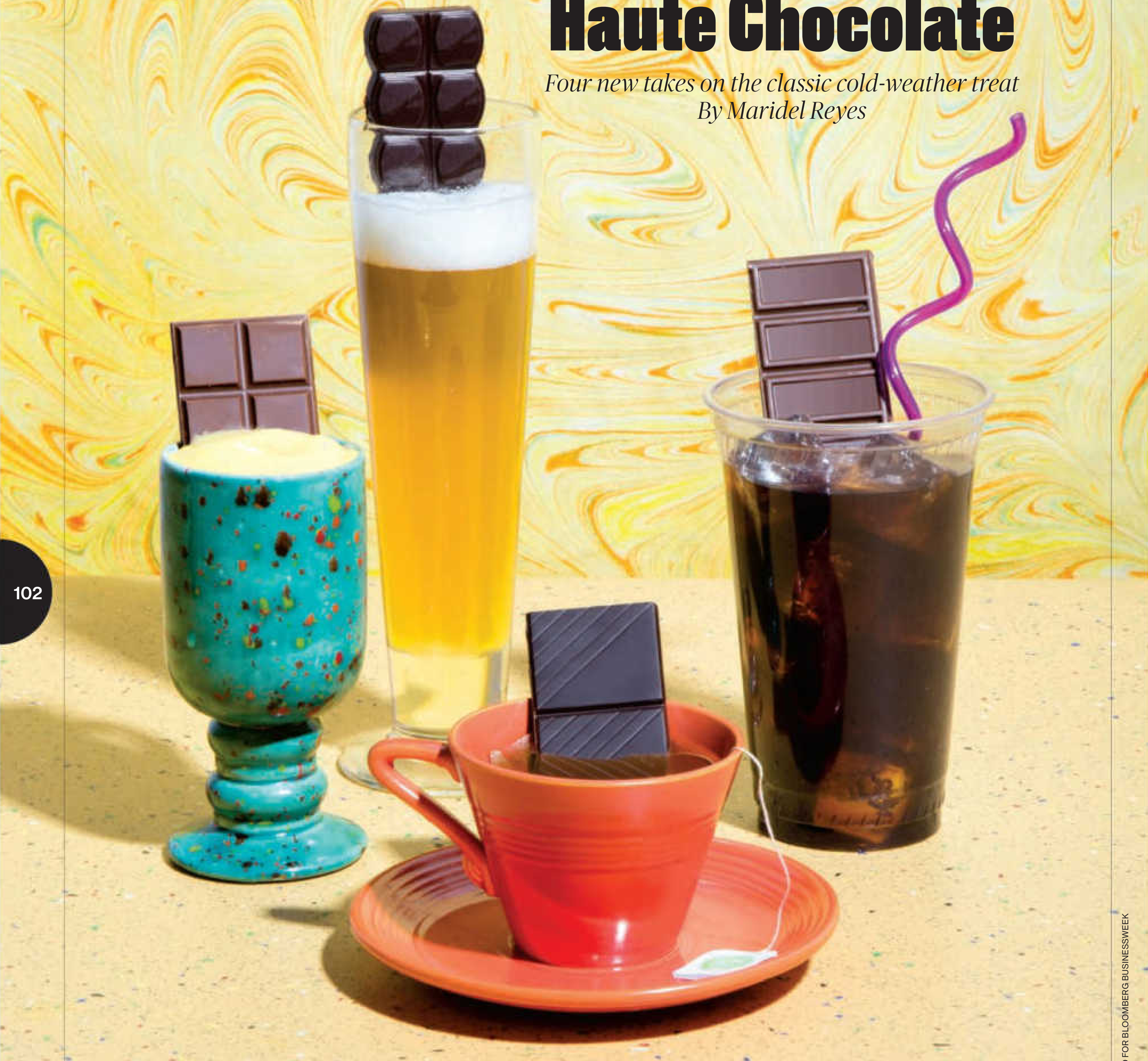
A few RealScout employees try to find meaning in building shelter and fire. "At face value, no, obviously there's not a lot of skills you can bring back to the office," says Sherin Varghese, a marketing and operations engineer. Office manager Megan Keefhaver points out, "If I'm building this shelter in the wilderness, I'm not going to have a team to do it with." That being said, she's having "a blast," she says.

If fun is the main objective, it's unclear how successful the outing has been. Many of the RealScout employees spent a significant amount of time scrutinizing their iPhones. After the retreat, multiple employees go back to the office in Mountain View. A few say they appreciated spending time with people they don't work with on a regular basis. But still, says Arthur Kaneko, RealScout's chief operating officer, "I like normal work." Ⓑ

PHOTOGRAPHS BY MATHEW SCOTT FOR BLOOMBERG BUSINESSWEEK; ILLUSTRATIONS BY 731

Haute Chocolate

Four new takes on the classic cold-weather treat
By Maridel Reyes



Blended

Try it at: Dandelion Chocolate, San Francisco

In this drink, the raw fruit from the cacao pod–the stuff around the beans, not the beans themselves–is blended with ice and sugar. The resulting drink from this chocolate factory in the Mission District looks like a piña colada and tastes like lychee fruit: mild, tart, and tropical.

Beer (sort of)

Try it at: Mast Brothers chocolate shops in London and Brooklyn, N.Y.

Mast Brothers takes cold-brewed chocolate (see far right) and injects it with nitrogen for a soft, Guinness-like fizz. Both locations offer three varieties on tap: sweet, dry, and vanilla-infused, which is like a lighter, chocolaty root beer. Bottled versions are in the works. Alcoholic versions are not.

Steeped

Try it at: Vicuña Chocolate Factory & Café, Peterborough, N.H.

Vicuña Chocolate Factory owner Neely Cohen went to Peru to learn about chocolate making and got hooked on the infusion the farmers would make from cacao husks and nibs. She serves the same bright, nutty tea at her cafe in New Hampshire and sells bags of it for customers to make the drink at home.

Cold-Brew

Try it at: Home with a sampler from Map Chocolate, Eugene, Ore. *($15, mapchocolate.com)*

Like cold-brew coffee, cold-brew chocolate is less acidic than the hot version. To make it, soak ¼ cup cacao grounds in a quart of water for at least four hours, then strain out the solids. Drink the beverage cold or warm, with coconut milk or cream, sweetened or unsweetened.

PHOTOGRAPH BY ADI GOODRICH AND SEAN PECKNOLD FOR BLOOMBERG BUSINESSWEEK

SO BAD, HE'S GOOD

After three seasons, Nathan for You *has more terrible business ideas. By Karl Taro Greenfeld*

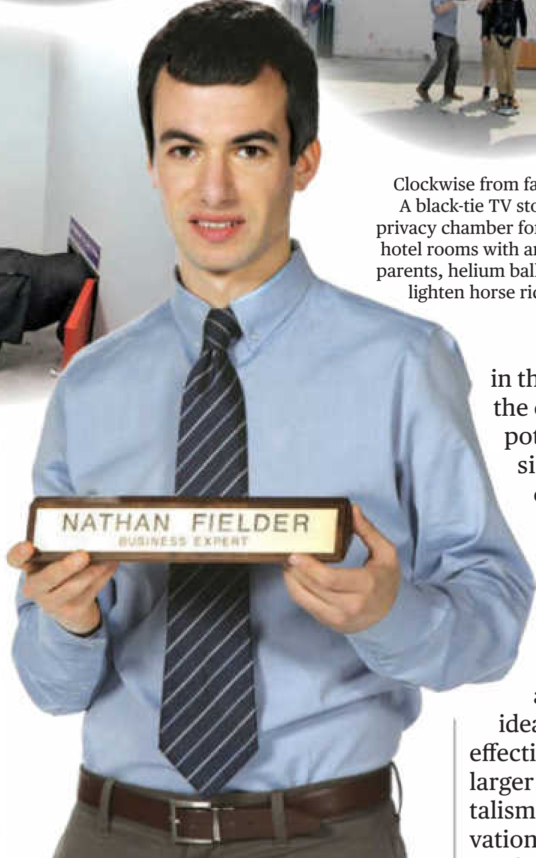
Nathan Fielder, 32, a self-styled consultant and graduate of a "top Canadian business school, with really good grades," is deeply invested in small businesses. His show, *Nathan for You*, finishing its third season on Comedy Central, depends on them.

The format of *Nathan for You* is similar to celebrity entrepreneur shows such as *Bar Rescue* or *Kitchen Nightmares*. Fielder meets each week with beleaguered business owners, bonds with them, and gives his prescription for turning things around. Unlike the hosts of those other shows, however, Fielder has no actual expertise to offer his subjects: He did graduate with a bachelor of commerce from the University of Victoria in 2005, but he's been working in comedy ever since.

In this season's second episode, he tells the owner of a stable that she can increase her business by attaching helium balloons to the backs of overweight riders who'd pose a health risk to her horses. In another installment, Fielder tells a television store owner that he can compete with a local Best Buy by lowering his flatscreen prices to $1 and exploiting the megachain's price-match guarantee. The idea is engaging not only because it's ludicrous, but because who hasn't had the thought while looking through the appliance ads in the Sunday paper?

Each earlier season of *Nathan for You* has produced a viral hit. The first video shows a pig seemingly rescuing a goat from a pond; it got millions of views on YouTube in 2012 before being used on the show to promote a petting zoo. Last year's was about a coffee shop that tested the limits of parody law by calling itself Dumb Starbucks. Both bits blew up online well before their season premieres aired, so they got no promotional help from the show. This season has been lower-profile but no less cheeky. In one episode, Fielder discovers his favorite windbreaker is made by a company that publicly praised a Holocaust denier. In retaliation, he decides to found a competitor, Summit Ice, "the first outdoor apparel company to openly promote the true story of the Holocaust."

The types of small-business owners who appear on *Nathan for You* are a different breed from the sleek, vetted reality show contestants who kowtow before Mark Cuban and Barbara Corcoran on ABC's *Shark Tank*, never mind the aspiring tycoons who appear on CNBC's *The Profit*. Fielder's business people are just regular folk—a coffee shop owner, a mechanic, a toy designer—trying to make it to the end of the month. All they know is they've signed a waiver to appear on a TV show, so if Fielder were to come off as condescending or dismissive, viewing would be excruciating. It's his earnestness that makes for comedy instead of cruelty.



Clockwise from far left: A black-tie TV store, a privacy chamber for kids in hotel rooms with amorous parents, helium balloons to lighten horse riders

FIELDER: DANNY FELD; COMEDY CENTRAL (3)

Where Fielder is particularly brilliant is in the implementation of his plans. In the case of the TV store, he dissuades potential purchasers of its $1 televisions by instituting a strict dress code—bow ties and tuxedos for men—within the store. In another episode this season, Fielder initiates a you-break-it-you-buy-it policy at an antique store, then changes the operating hours to late nights, narrows the aisles, and lures in drunk patrons. His ideas are more hilarious than they are effective, but cumulatively, they make a larger point about contemporary capitalism and the perils of the cult of innovation: Newer isn't always better. But it can be funnier. Ⓑ

Work Doesn't Have to Be Hard

Soft-edged furniture for a comfy-cozy office
By Monica Khemsurov

Patch acoustic panels by Stokke Austad for GU
$1,000; gu.no

Channel the tranquility of the Arctic with these gorgeous noise-damping panels, made with textured wool from a 120-year-old Norwegian mill.

BuzziShade by Stal Collectief for BuzziSpace
$1,724; yliving.com

This comically large felt-covered lamp would brighten up any workplace. Bonus: The soft fabric absorbs reverb, which makes it great for echo-y open-plan offices.

Pilot chair by Barber Osgerby for Knoll
price on request; knoll.com

The pillowy back and seat of this desk chair flex to suit the sitter. Upholstered or stainless steel arms are optional.

Pix Pouf by Ichiro Iwasaki for Arper
from $762; arper.com

Use this graceful pouf as a side table, an inviting seat for guests, or simply a late-afternoon meditation spot. Choose from seven size options, the largest of which seats five.

PHOTOGRAPHS BY WILL ANDERSON FOR BLOOMBERG BUSINESSWEEK; SET DESIGN: HEAVY SETTING

Active Duty mobile bookcase by Heartwork
$455; heartwork.com

These petite bookcases easily roll, even when full. They double as room dividers, which come in handy in flexible workspaces.

Color Wheel ottoman by Alexander Girard for Herman Miller
$2,100; hermanmiller.com

Girard designed this piece in 1967, a time when he thought offices were getting "more inviting." He turned out to be ahead of his time: The ottoman went out of production a year later, only to be given a splashy reissue in 2014.

Arlo sofa by Most Modest for HighTower
$3,250; hightoweraccess.com

A long, squishy sofa encourages colleagues to make themselves comfortable. This one also comes in a high-backed version to provide extra peace and quiet.

Allstar chair by Konstantin Grcic for Vitra
$1,100; vitra.com

With its rounded edges and chunky plastic arms, this is the safety scissors of chairs—in a chic way. The fuzzy wool upholstery comes in a dozen bright colors, so you can mix and match.

Flo desk lamp by Foster + Partners for Lumina
$780; m2l.com

The LED bulbs in this long-stemmed lamp can be dimmed for softer lighting as needed.

X table by Kibisi for Holmris
$1,600; suiteny.com

This sleek desk relies on the same design principle as your grandmother's ironing board. Use the hand crank to raise or lower it to whatever height is comfortable.

THREE AND OUT

NFL careers are brutish, short, and ... then what? By Ira Boudway

Five former NFL players sit around a table talking about the moment they knew. "My knee stopped working. I couldn't bend my leg anymore," says Dedrick Roper, an ex-linebacker for the Philadelphia Eagles whose last game was in the 2007 preseason. Doctors drained his knee and saw floating cartilage, the sign of a tear. Roper spent eight months rehabbing. "I was in probably the best shape of my life," he says. "Last day of training, I started running, and my knee just blew up."

Clayton, wearing Livv headphones

The story was much the same for Mark Clayton, a former wide receiver with the Baltimore Ravens and St. Louis Rams, and Moses Moreno, a quarterback for the Chicago Bears and San Diego Chargers: injury, rehab, reinjury, the end. Ryan McNeil, a one-time Pro Bowl defensive back who played for six teams over 10 years, decided to retire when only bad teams were calling with offers. A failed physical closed the door for Babatunde Oshinowo, a defensive tackle who made the roster for the Bears and the Cleveland Browns.

Back in January, these men gathered at Babson College outside Boston for a three-day Entrepreneur's Boot Camp. Along with 25 fellow students, they heard lectures on fundraising, customer discovery, and the developmental stages of an expanding business. The other attendees paid $4,600 for the course, but it was free for the former players, their tuition covered by an organization called the Trust. Founded in 2013 and jointly funded by the NFL and its players' union, the Trust is a social services shop for the roughly 13,000 men who've played at least two seasons in the league.

Former players, often still in their 20s, have to start over at an age when most people are just starting out. The average length of an NFL career is contested: The players' union says it's about three years, the league says six. Either way, the transition can be rocky. They leave a workplace of violence, camaraderie, and structure for a life that's tamer, lonelier, and less organized. Their income usually drops. They're all damaged to one degree or another.

In addition to providing educational scholarships, the Trust pays for career counseling, financial planning, and sports club memberships and provides "brain and body" assessments at five hospitals across the country. "We call it a holistic approach to a former player's transition," says Bahati VanPelt, the organization's executive director. The Trust and its grab bag of benefits—while inadequate to address the acute needs of former players suffering the consequences of repeated head trauma—are a boon for the many NFL alums who are neither desperate nor set for life. "There is a struggle that exists for most of us," says Zamir Cobb, a former wide receiver who's now a program manager for the Trust. "But guys are finding their way through."

On the last day of the workshop, selected students make five-minute pitches. Clayton, in a black hoodie and jeans, exhales audibly. "Talking in front of people, I get very nervous," he says. His startup was born from a narrow problem: wanting an over-the-ear headphone that wouldn't fall off during workouts. The other students quiz Clayton about the strength of his patents, the possibility of licensing them to an established brand, and whether his band fits a broad range of head sizes.

Nine months later, Clayton had raised $118,000 on Kickstarter for his company, Livv Headphones. Moreno has a business providing school photos in San Diego, McNeil runs a publishing company that caters to sports world power brokers, and Oshinowo wants to get into youth coaching and counseling. Roper arrived at Babson with an idea for an online service that would connect electric bike owners with mechanics, but the course convinced him there wasn't enough of a market for it. In April he took a job managing grants for ChargePoint, which operates more than 23,000 electric-car-charging stations worldwide. It's a long way from hunting quarterbacks. "I had to completely put it out of my mind and reimagine myself," says Roper. "I didn't watch a football game for three years." Ⓑ

Roper at a ChargePoint station in Campbell, Calif.

PHOTOGRAPHS BY DRU DONOVAN FOR BLOOMBERG BUSIENSSWEEK; GETTY IMAGES(2)

SARAH DADUSH

39, assistant professor, Rutgers School of Law, Newark, N.J.

Do you always wear those glasses?
Yes, they're my hipster cred. I had a student come up to me recently and ask if I was Professor Dadush. He said, "They told me to look for the one who looks like a student in really cool glasses."

What do you teach?
One class in domestic contracts to first-year law students, but the rest of my classes are more international in focus. I teach a contracts class for evening students as well in the fall.

Is that a vintage blouse?
It's my mom's from the '80s.

How did you wind up with it?
Maybe seven years ago I said to her, "Don't give away or throw away anything!" I don't have to alter anything of hers.

What's your outfit strategy?
I think about the female students in my class and try to show them how to dress professionally without compromising style or fun. I would describe my style as funky librarian.

Why these shoes?
They're extraordinarily comfortable for when I'm standing for two hours straight.

Your skirt is definitely funky.
I love the color—like a burnt orange. The evening students are tired, so it's important to me to be peppy and up, and my clothes can help me do that.

PHOTOGRAPH BY BORU O'BRIEN O'CONNELL FOR BLOOMBERG BUSINESSWEEK

Interview by Jason Chen

How Did I Get Here?

WENDE ZOMNIR

Co-founder and chief creative officer, Urban Decay

With her prom date, 1984

"I played basketball—we'd play at schools all over Europe, so I got to see these great places."

Education

St. John's International School, Waterloo, Belgium, class of 1985

University of North Texas, Denton, class of 1989

"I went to Southern Methodist University for a year, but it was too debutante for me."

Modeling a *Flashdance*-inspired look, 1983

Work Experience

1983–85
Model

1989–94
Client service coordinator, account executive, Leo Burnett

1989–94
Aerobics instructor, Bally Total Fitness

1994–95
Account supervisor, Wunderman Cato Johnson

1995–2004
"Ms. Decay," executive creative director, Urban Decay

2005–Present
Chief creative officer, Urban Decay

"I worked on Marlboro, which pained me."

With Leo Burnett colleagues and friends, 1993

"On catalogs and newspaper shoots, they'd say, 'Bring a nude pair of pumps, a black pair of pumps, and a makeup kit.' You had to do your own."

Manson

Stefani

"We launched with nail polish and lipstick. I would show up at music festivals to track down Shirley Manson and Gwen Stefani and get them to try the products. It was guerrilla, grass roots."

"I got a call from the fiancé of a friend I'd met at Bally who said, 'I work for this woman who started Cisco Systems. She has an idea for a cosmetics company. Do you want to meet with us?' "

With her kids near their home in Newport Beach, Calif., 2015

"We got bought by L'Oréal in 2012. To take the brand globally, you really need a partner with the infrastructure and ability to do that. We've expanded into 28 countries, and sales are about $475 million."

Product Milestones

1998: **Midnight Cowboy eye shadow**: "The edgy name was part of the secret sauce—it was naughty. That was our first big hit."

2010: **Alice in Wonderland book of shadows**: "We sold out before they even got on shelves."

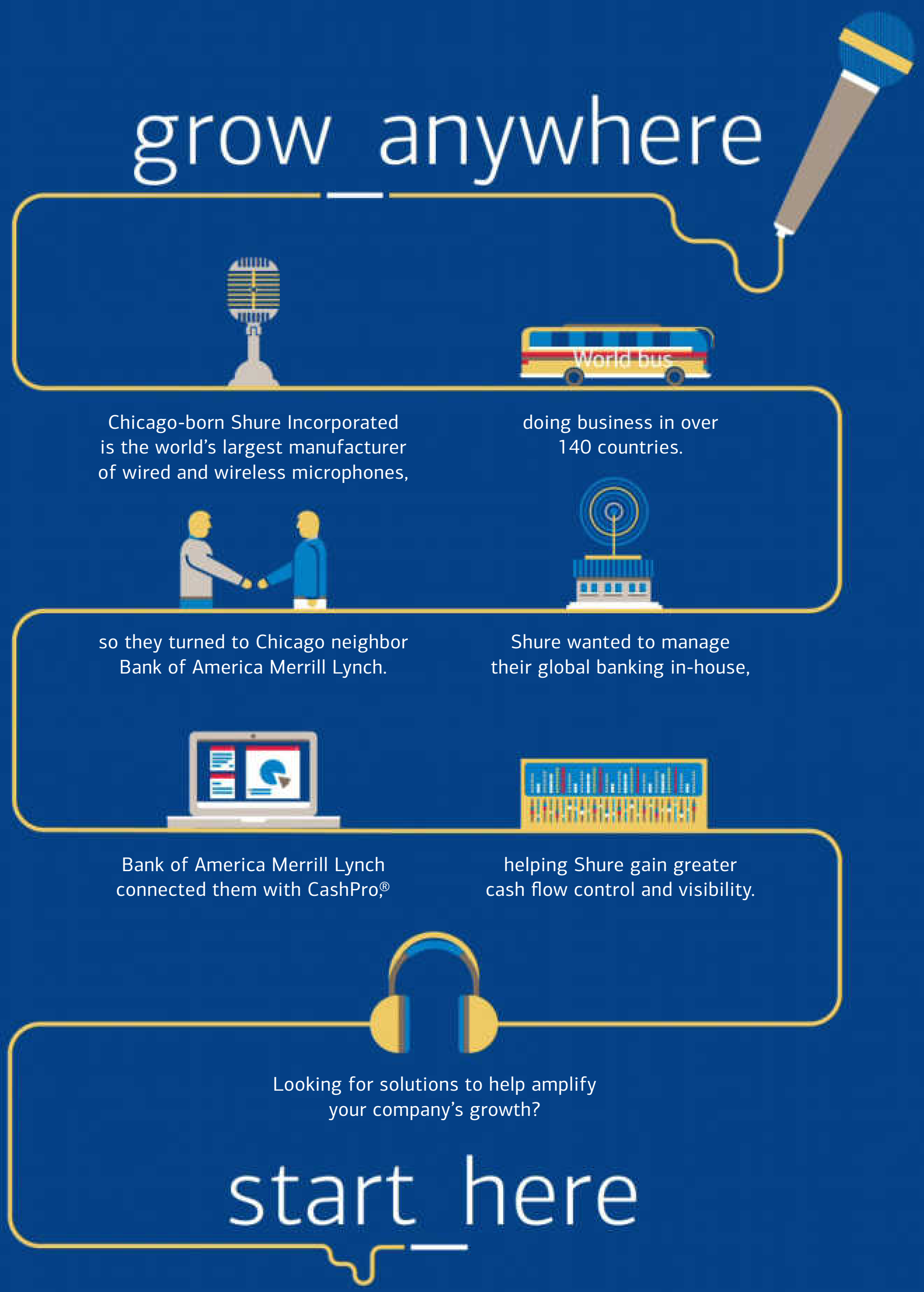
2015: **UD Gwen Stefani eye shadow palette**: "To circle back and work with her when we're both adults is a thrill."

Life Lessons

1. "Makeup isn't about covering your flaws—it's about expressing yourself." **2.** "Being a mother teaches you to be a good manager." **3.** "The work is finding the perfect intersection between art and commerce."

Courtesy subject (5). Getty Images (2)

Bloomberg Businessweek (USPS 080 900) December 7 – December 13, 2015 (ISSN 0007-7135) H Issue no. 4454 Published weekly, except one week in January, March, June, and August, by Bloomberg L.P. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Executive, Editorial, Circulation, and Advertising Offices: Bloomberg Businessweek, 731 Lexington Avenue, New York, NY 10022. POSTMASTER: Send address changes to Bloomberg Businessweek, P.O. Box 37528, Boone, IA 50037-0528. Canada Post Publication Mail Agreement Number 41989020. Return undeliverable Canadian addresses to DHL Global Mail, 355 Admiral Blvd., Unit4, Mississauga, ON L5T 2N1. E-mail: bwkcustserv@cdsfulfillment.com. QST#1008327064. Registered for GST as Bloomberg L.P. GST #12829 9898 RT0001. Single Copy Sales: Call 800 298-9867 or e-mail: busweek@nrmsinc.com. Subscriber Services: Call 800 635-1200 or log on to our website: http://www.businessweek.com/custserv/manage.htm. Educational Permissions: Copyright Clearance Center at info@copyright.com Reprints & General Permissions: The YGS Group at 800 290-5460 x100 or businessweekreprints@theYGSgroup.com. PRINTED IN THE U.S.A. CPPAP NUMBER 0414N68830



Learn how connecting with Bank of America Merrill Lynch here can help you grow anywhere.

bofaml.com/shure

Bank of America Merrill Lynch

The power of global connections™

Go Further